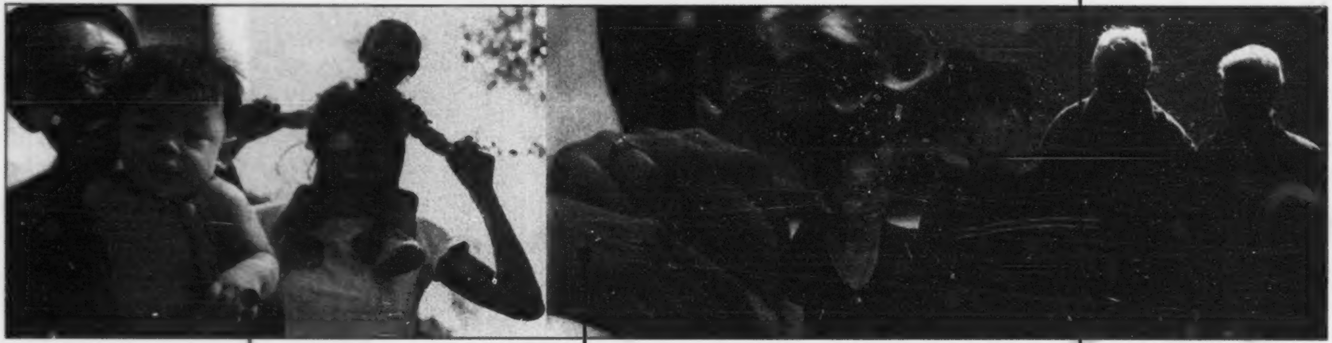
Selected Vital Statistics and Health Status Indicators



ONE HUNDRED AND THIRTY-EIGHTH
ANNUAL REPORT 2009

British Columbia Vital Statistics Agency

BRITISH
COLUMBIA
The Best Place on Earth

Selected Vital Statistics and Health Status Indicators

ONE HUNDRED AND THIRTY-EIGHTH ANNUAL REPORT 2009

British Columbia Vital Statistics Agency

Foreword

The British Columbia Vital Statistics Agency (the Agency) is pleased to present the 2009 Annual Report, the one hundred and thirty-eighth published since the establishment of the Division of Vital Statistics in 1872. The tables, figures, and maps in this publication are based on information collected from registrations of live births, stillbirths, deaths, and marriages, as registered by the Agency for events occurring in the 2009 calendar year.

This publication contains approximately 100 tables, figures, and maps that summarize selected information about the vital events taking place in British Columbia (BC). Although some tables and information relate to vital events occurring within the province which may include visitors to BC, such as marriages, the majority are specific to residents of BC.

The information relating only to residents is important for evaluating and monitoring the health status of the province's population.

Throughout the report, key indicators are presented for the province's Health Authorities (HA), Health Service Delivery Areas (HSDA) and Local Health Areas (LHA). The report includes a detailed Glossary, defining the terms used in the body of the publication; as well as a Methodology section, explaining the statistical computations in the main body. A set of Information Boxes supplement the standard tables with information on a wide range of subjects, from a profile of a Typical Day in British Columbia to Place of Birth for Midwife Assisted Births and Usual Residence of People Married in 2009.

Beginning with the 2000 Annual Report, the Agency has presented data using the tenth revision of the World Health Organization's International Statistical Classification of Diseases and Related Health Problems (ICD-10) coding scheme. Where possible, this report follows a format consistent with previous annual reports that presented statistics from the current year along with comparative statistics from the preceding five years. However, some tables and figures present statistics prior to 2000 when an earlier version of the coding scheme (ICD-9) was in effect. Many changes in the codes and in the rules for selection of the underlying cause of death preclude direct comparison of ICD-9 and ICD-10 data. Extensive manual reviews using translation tables in conjunction with recoding of data from ICD-9 to ICD-10 enabled the production of trend data. This approach is unique to publications of the Agency.

The Agency would like to acknowledge the many groups and individuals who ensure complete and accurate recording of vital events. Their contributions have resulted in continual improvement in the quality of vital event data and the quality of this report.

Original signed by,

Jack Shewchuk
Chief Executive Officer
British Columbia Vital Statistics Agency

Table of Contents

I. GENERAL INFORMATION

Introduction 3
Registrations 3
Figure 1 Local Health Area, British Columbia (map) 6
Figure 2 Health Authority and Health Service Delivery Area, British Columbia (map) 7

II. TRENDS IN VITAL EVENTS

Trends Introduction 11
Overview 11
Table 1 Live Births, Deaths, Marriages and Stillbirths, British Columbia, 1950–2009 12
Figure 3 Crude Rates of Live Births, Deaths, Marriages and Stillbirths, British Columbia, 1950–2009 13
Table 2 Natural Population Increases, British Columbia and Canada, 1950–2009 14
Figure 4 Trends of Natural Population Growth, British Columbia and Canada, 1950–2009 14
Table 3 Live Births, Deaths, Marriages and Stillbirths by Month, British Columbia, 2009 15
Figure 5 Live Births, Deaths, Marriages and Stillbirths by Month, British Columbia, 2009 15
Fertility and Live Birth Trends 16
Table 4 Total Fertility Rates, British Columbia, 1950–2009 17
Figure 6 Total Fertility Rates and Number of Live Births, British Columbia, 1986–2009 17
Figure 7 Live Births by Age of Mother, British Columbia, 1986–2009 18
Figure 8 Multiple Births as a Percentage of Live Births, British Columbia, 1986–2009 18
Figure 9 Low Birth Weight Live Births, British Columbia, 1986–2009 19
Figure 10 Low Birth Weight Live Births for Mothers Aged 35+, British Columbia, 1986–2009 19
Figure 11 Cesarean Sections, British Columbia, 1986–2009 20
Figure 12 Cesarean Sections by Health Service Delivery Area, British Columbia, 2009 20
Figure 13 Cesarean Sections by Age of Mother, British Columbia, 1986–2009 21
Infant Mortality Trends 22
Figure 14 Infant Mortality, British Columbia, 1986–2009 22
Table 5 Infant Mortality, British Columbia and Canada, 1965–2009 23
Figure 15 Infant Mortality by Age of Mother, British Columbia, 1986–2009 24
Figure 16 Percentage of Infant Mortality by Age of Mother, British Columbia, 2009 24
Death Trends 25
Figure 17 Deaths and Death Rates, All Causes of Death, British Columbia, 1986–2009 26
Figure 18 Average Age at Death, British Columbia, 1986–2009 27
Figure 19 Deaths and Death Rates, Malignant Neoplasms (Cancer), British Columbia, 1986–2009 27
Figure 20 Deaths and Death Rates, Malignant Neoplasm of Lung, British Columbia, 1986-2009 28
Figure 21 Death Rates by Gender, Malignant Neoplasm of Lung, British Columbia, 1986-2009 28
Figure 22 Deaths and Death Rates, Endocrine, Nutritional and Metabolic Diseases, British Columbia, 1986-2009 29

FIGURE 23 Deaths and Death Rates, Diabetes Mellitus, British Columbia, 1986–2009 29
FIGURE 24 Deaths and Death Rates, Nervous System Diseases, British Columbia, 1986-2009 30
FIGURE 25 Deaths and Death Rates, Cardiovascular Disease, British Columbia, 1986-2009 30
FIGURE 26 Deaths and Death Rates, Cerebrovascular Diseases, British Columbia, 1986-2009 31
FIGURE 27 Deaths and Death Rates, Motor Vehicle Accidents, British Columbia, 1986–2009 31
MARRIAGE TRENDS 32
TABLE 6 Age of First and All Marriages, British Columbia, 1977–2009 32
FIGURE 28 Age of First and All Marriages, British Columbia, 1977–2009 32

III. BIRTH-RELATED STATISTICS

BIRTH INTRODUCTION 35
BIRTHS - GENERAL INDICATORS 35
TABLE 7 Births by Age of Mother and Live Births by Birth Order, British Columbia, 2009 38
TABLE 8 Total Live Births by Age of Father, Age of Mother and Out-of-Wedlock, British Columbia, 2009 39
TABLE 9 Live Births by Age of Mother and Kind of Birth, British Columbia, 2009 39
TABLE 10 Live Birth Fertility Rates by Local Health Area, British Columbia, 2004–2008 and 2009 40
FIGURE 29 Live Birth Teenage Fertility Rates by Local Health Area, British Columbia, 2004–2008 (map) 41
TABLE 11 Live Births by Mode of Delivery and Age of Mother, British Columbia, 2009 42
TABLE 12 Live Births by Local Health Area and Mode of Delivery, British Columbia, 2009 44
FIGURE 30 Cesarean Deliveries of Live Born Infants by Local Health Area, British Columbia, 2009 (map) 45
BIRTHS - BIRTH WEIGHT 46
TABLE 13 Live Births by Birth Weight, Gender, and Gestational Age, British Columbia, 2009 47
TABLE 14 Live Births by Birth Weight and Age of Mother, British Columbia, 2009 48
TABLE 15 Low Birth Weight Live Births by Age of Mother and Gender, British Columbia, 2009 49
FIGURE 31 Low Birth Weight Live Births by Age of Mother, British Columbia, 2009 49
TABLE 16 Low Birth Weight Live Births by Local Health Area and Gestational Age, British Columbia, 2004–2008 and 2009 50
FIGURE 32 Low Birth Weight Live Births by Local Health Area, British Columbia, 2004–2008 (map) 51
BIRTHS - MATERNAL COMPLICATIONS AND PERINATAL CONDITIONS 52
TABLE 17 Maternal Complications of Pregnancy and Delivery in Live Births by Age of Mother, British Columbia, 2004–2008 and 2009 54
TABLE 18 Maternal Complications of Pregnancy and Delivery in Live Births by Local Health Area, British Columbia, 2004–2008 and 2009 56
FIGURE 33 Maternal Complications of Pregnancy and Delivery in Live Births by Local Health Area, British Columbia, 2004–2008 (map) 57
TABLE 19 Perinatal Conditions in Live Births by Age of Mother, British Columbia, 2004–2008 and 2009 58
TABLE 20 Perinatal Conditions in Live Births by Local Health Area, British Columbia, 2004–2008 and 2009 60
FIGURE 34 Perinatal Conditions in Live Births by Local Health Area, British Columbia, 2004–2008 (map) 61

IV. DEATH-RELATED STATISTICS

DEATH INTRODUCTION 65
DEATHS - GENERAL INDICATORS 65
TABLE 21 Causes of Death by Gender and Age, British Columbia, 2009 68
LEADING CAUSES OF DEATH 69
TABLE 22 Twelve Leading Causes of Death, British Columbia, 2004–2008 and 2009 70
FIGURE 35 Twelve Leading Causes of Death, British Columbia, 2009 71
TABLE 23 Leading Causes of Death by Age and Gender, British Columbia, 2009 72
INFANT MORTALITY 74
TABLE 24 Infant Mortality by Age of Mother and Birth Weight, British Columbia, 2009 75
TABLE 25 Infant Mortality by Gestational Age and Birth Weight, British Columbia, 2009 75
TABLE 26 Infant Mortality by Local Health Area, British Columbia, 2004–2008 and 2009 76
FIGURE 36 Infant Mortality by Local Health Area, British Columbia, 2004-2008 (map) 77
TABLE 27 Selected Causes of Infant Deaths and Stillbirths, British Columbia, 2009 78
DEATHS DUE TO HIV 78
FIGURE 37 Deaths Due to HIV Disease by Age Group, British Columbia, 2004–2009 79
TABLE 28 Deaths Due to HIV Disease by Gender and Age Group, British Columbia, 1994–2009 80
TABLE 29 Deaths Due to HIV Disease by Health Service Delivery Area, British Columbia, 1994–2009 81
EXTERNAL CAUSES OF DEATH 81
TABLE 30 External Causes of Death by Gender, British Columbia, 2009 82
TABLE 31 External Causes of Death by Local Health Area, British Columbia, 2009 83
TABLE 32 Suicide Deaths by Month and Gender, British Columbia, 2009 84
MORTALITY DUE TO ALL CAUSES OF DEATH 86
TABLE 33 Standardized Mortality Ratio – All Causes of Death by Local Health Area, British Columbia, 2004–2008 and 2009 88
FIGURE 38 All Causes of Death by Local Health Area, British Columbia, 2004–2008 (map) 89
POTENTIAL YEARS OF LIFE LOST 90
TABLE 34 Potential Years of Life Lost and Age Standardized Mortality Rates by Selected Causes of Death, British Columbia, 2009 92
FIGURE 39 Potential Years of Life Lost and Age Standardized Mortality Rates by Selected Causes of Death, British Columbia, 2009 93
TABLE 35 Potential Years of Life Lost by Age Group and Major Causes of Death (Age Under 75 Years), British Columbia, 2009 94
FIGURE 40 Potential Years of Life Lost Standardized Rates by Age Group and Gender, Major Causes of Death (Age Under 75 Years), British Columbia, 2009 95
TABLE 36 Potential Years of Life Lost by Local Health Area, External Causes of Death (Age Under 75 Years), British Columbia, 2004–2008 and 2009 96
FIGURE 41 External Causes of Death by Local Health Area, British Columbia, 2004–2008 (map) 97
MEDICALLY TREATABLE DISEASES 98
TABLE 37 Deaths Due to Medically Treatable Diseases by Selected Causes and Gender, British Columbia, 2004–2008 and 2009 99
TABLE 38 Standardized Mortality Ratio by Local Health Area, Deaths Due to Medically Treatable Diseases, British Columbia, 2004–2008 and 2009 100
FIGURE 42 Deaths Due to Medically Treatable Diseases by Local Health Area, British Columbia, 2004–2008 (map) 101

ALCOHOL-RELATED DEATHS 102
TABLE 39 Alcohol-Related Deaths by Cause, British Columbia, 2004–2008 and 2009 103
FIGURE 43 Alcohol-Related Deaths by Cause, British Columbia, 2009 104
TABLE 40 Alcohol-Related Deaths by Age and Gender, British Columbia, 2009 105
TABLE 41 Standardized Mortality Ratio by Local Health Area, Alcohol-Related Deaths, British Columbia, 2004–2008 and 2009 106
FIGURE 44 Alcohol-Related Deaths by Local Health Area, British Columbia, 2004–2008 (map) 107
SMOKING-ATTRIBUTABLE DEATHS 108
FIGURE 45 Smoking-Attributable Mortality by Selected Causes and Gender, British Columbia, 2009 108
TABLE 42 Smoking-Attributable Mortality, British Columbia, 2009 109
DRUG-INDUCED DEATHS 110
TABLE 43 Drug-Induced Deaths by Age and Gender, British Columbia, 2009 110
TABLE 44 Drug-Induced Deaths by Cause, British Columbia, 2004–2008 and 2009 111
FIGURE 46 Drug-Induced Deaths by Cause, British Columbia, 2009 111
TABLE 45 Standardized Mortality Ratio by Local Health Area, Drug-Induced Deaths, British Columbia, 2004–2008 and 2009 112
FIGURE 47 Drug-Induced Deaths by Local Health Area, British Columbia, 2004–2008 (map) 113
DRUG OVERDOSE DEATHS 114
Table 46 ASMR For Unintentional Illicit/Illegal Overdose Deaths by Health Authority, British Columbia, 2003-2009 115
Table 47 ASMR For Unintentional Illicit/Illegal Overdose Deaths by Gender, British Columbia, 2003-2009 115
Figure 48 ASMR For Unintentional Illicit/Illegal Overdose Deaths by Gender, British Columbia, 2003-2009 115
ACCIDENTAL FALL DEATHS 118
Table 48 Deaths Directly and Indirectly Due to Falls by Age, British Columbia, 2003-2009 119
Figure 49 Deaths Directly and Indirectly Due to Falls, Ages 60-80+ British Columbia, 2003-2009 119
BURIALS AND CREMATIONS 120
TABLE 49 Method of Disposition of Decedent, British Columbia, 1986–2009 120

V. MARRIAGE-RELATED STATISTICS

MARRIAGE INTRODUCTION 125
TABLE 50 Marriages by Marital Status, British Columbia, 2009 126
TABLE 51 Marriages by Age, British Columbia, 2009 126
TABLE 52 Religious Representatives on Register and Marriages Performed by Religious Denomination, British Columbia, 2009 127
TABLE 53 Marriage Commissioners on Register by Type and Marriages Performed, British Columbia, 2009 127

VI. INFORMATION BOXES

On a Typical Day in British Columbia in 2009 10
Births by Mother's Country of Birth, British Columbia, 2009 37
Place of Birth for Midwife Assisted Births, British Columbia, 2005-2009 43
Top 25 Baby Names in 2009 55
Birth and Older Mothers in British Columbia, 2000-2009 59

Deaths by Decedent's Country of Birth, British Columbia, 2009 64
Place of Death for Deaths from Natural Causes, British Columbia, 2000-2009 66
Cancer Deaths in British Columbia, 2000 to 2009 67
Premature (<75 years) External Causes of Death in British Columbia, 1999 to 2008 85
Deaths Aged 65+ by Gender and Health Service Delivery Area, British Columbia, 2009 87
Age at Death of the Oldest Male and Female, British Columbia, 1990-2009 91
Unintentional Illicit/Illegal Drug Deaths, British Columbia, 2001-2009 116
Counts of Deaths by Causative Substances -
    Overdose Deaths by Type of Drug, British Columbia, 2001-2009 117
Method of Disposition by Decedent's Local Health Area of Residence, British Columbia, 2009 121
Marriages by Other Non Christian Denominations, British Columbia, 2009 124
Usual Residence of Persons Married in British Columbia in 2009, Opposite Sex Marriages 128
Usual Residence of Persons Married in British Columbia in 2009, Same Sex Marriages 129

GLOSSARY 131

METHODOLOGY 145

APPENDIX 1: STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA, AND COMMUNITY, BRITISH COLUMBIA, 2009 155

APPENDIX 2: DETAILED CAUSE OF DEATH BY GENDER AND AGE, BRITISH COLUMBIA, 2009 175

APPENDIX 3: SELECTED HEALTH STATUS INDICATORS BY LOCAL HEALTH AREA, HEALTH SERVICE DELIVERY AREA, AND HEALTH AUTHORITY, BRITISH COLUMBIA, 2005–2009 189

TABLE A Summary Statistics by Local Health Area, British Columbia, 2005–2009 191
TABLE B Mortality Statistics by Local Health Area, British Columbia, 2005–2009 193
TABLE C Summary Statistics by Health Service Delivery Area, British Columbia, 2005–2009 198
TABLE D Mortality Statistics by Health Service Delivery Area, British Columbia, 2005–2009 199
TABLE E Summary Statistics by Health Authority, British Columbia, 2005–2009 201
TABLE F Mortality Statistics by Health Authority, British Columbia, 2005–2009 202

General Information

Introduction

The Agency is responsible for the ascertainment, registration, and certification of vital events through the administration of the *Vital Statistics Act*, *Marriage Act*, and *Name Act*. Statistical information contained in this report is summary data provided by the Agency for use by government agencies, health planners, researchers, and the general public. In order to maintain confidentiality, the information does not disclose personally identifiable data.

Registrations

Section 44 of the *Vital Statistics Act* states: "As soon as convenient after January 1 in each year, the chief executive officer must make, for the use of the Legislative Assembly and for public information, a statistical report of the births, stillbirths, marriages, deaths, adoptions and changes of name registered during the preceding calendar year."

The table below is presented to fulfill these requirements.

VITAL EVENTS REGISTERED IN BRITISH COLUMBIA IN 2009

Event Type	Residents	Non-Residents	Total
Live Births	44,908	233	45,141
Deaths	31,227	289	31,516
Stillbirths	429	12	441
Marriages[1]	20,088	2,381	22,469
Adoptions	612	66	678
Changes of Name[2]	4,832	-	4,832

Note: [1] Residents include marriages where only one party was a British Columbia resident, as well as those where both parties were residents.

[2] These registrations resulted in 5,240 name changes.

Although the *Vital Statistics Act* requires registration of events that occurred in the province, and Section 44 specifically requires that these be reported, vital events are often a reflection of the health status of the population; therefore, most of the information in this report pertains to residents. Specifically, live birth, stillbirth, and death statistics summarize events that occurred in the province to BC residents only, and exclude events to non-residents except where noted. Marriage statistics summarize all events that occurred in the province to either residents or non-residents. Vital events that occurred to BC residents outside the province are not shown in this report; Statistics Canada makes adjustments in its publications for events that occur to Canadians outside their province of usual residence.

VITAL EVENT DATA

Data presented in this report are based on registrations of birth, stillbirth, death, and marriage as reported to the Agency. Registration requirements for each type of event are outlined briefly as follows:

Live Births: The *Vital Statistics Act* prescribes the legal requirements for the registration of live births. The parent(s) of the child have the responsibility to complete the Registration of Live Birth within 30 days of the event. The physician or registered midwife who was in attendance at the birth must complete a Notice of Live Birth or Stillbirth (NOB) form which must be made available to the Agency within 48 hours of the event. Other requirements must be met if the birth was not attended by a physician or registered midwife.

Stillbirths: In the event of a stillbirth, the parent(s) must complete the Registration of Stillbirth. The physician or registered midwife who was in attendance at the birth must complete a Notice of Live Birth or Stillbirth (NOB) form. In addition, a physician or coroner is required to complete the Medical Certification of Stillbirth portion of the Registration of Stillbirth and deliver it to the funeral director who in turn submits it to the Agency.

Deaths: The physician in attendance at the last illness of the deceased person, or the coroner conducting an inquiry into the death of the person is required to complete a Medical Certification of Death. The Registration of Death is completed by the informant with assistance from the funeral home. The funeral home director submits both documents to the Agency to complete the registration and proceeds to issue the burial permit.

Marriages: The *Marriage Act* prescribes the legal qualifications of individuals to marry, the authorization of religious representatives and marriage commissioners to perform the marriage ceremony, and the solemnization of marriage. Under the *Marriage Act*, the Agency licences religious representatives of established religious denominations who desire the authority to solemnize marriage. The Agency recommends for appointment marriage licence issuers and marriage commissioners to perform civil ceremonies.

Couples who meet the legal qualifications to marry must obtain a marriage licence up to 90 days before the ceremony. They can choose a civil ceremony performed by a Marriage Commissioner or a religious ceremony performed by a religious representative. The Registration of Marriage is completed by the officiant after the ceremony, and must be signed by the officiant, the parties getting married, and two witnesses.

MEDICAL CODING

The Notice of Live Birth or Stillbirth (NOB) includes information on birth weight, gestation, and mode of delivery, as well as abnormalities of the infant and complications of pregnancy, labour, and delivery. The Medical Certification of Death and the Medical Certification of Stillbirth include information on the immediate cause of death or stillbirth, antecedent causes giving rise to the immediate cause, and other significant conditions contributing to the death or stillbirth. This information is processed by medically trained staff using the World Health Organization's International Statistical Classification of Diseases (ICD) coding scheme. For deaths, the coding system is applied via coding software developed in the United States and distributed for use across Canada by Statistics Canada. In some instances the Agency's medical coding staff has determined that strict adherence to the automated ICD classification process would misstate the intention of the physician completing the Medical Certification of Death.

In these cases, the Agency deviates slightly from standard ICD coding software output for the material presented in this report. Data coded to automated ICD classification standards are maintained by the Agency for comparison to other jurisdictions and for submission to Statistics Canada. The data presented in this report do not necessarily correspond to data for BC published elsewhere.

Since the early 1900s, the ICD has been revised regularly in order to reflect advances in medical science and changes in diagnostic terminology. The ninth revision of ICD (ICD-9) was used for medical coding of birth complications and causes of death from 1979 until 1999. Coding according to the tenth revision (ICD-10) was implemented at the beginning of the year 2000. Many changes in the codes and in the rules for selection of the underlying cause of death precluded direct comparison of data in ICD-10 with data from earlier years. Translation tables were used, and extensive manual reviews and recoding of data from ICD-9 to ICD-10 were completed in order to be able to provide trend data in this annual report.

TIME PERIODS

This report pertains to events that occurred in the calendar year 2009. Selected tables present aggregate information for the previous five-year period. These broader time periods permit more meaningful tests of statistical significance when analyzing data at sub-provincial levels, and can smooth out random fluctuations that occur when annual numbers are small. For regional health status profiles, readers are encouraged to refer to measures of statistical significance and use data presented for the five-year aggregates.

The data for earlier years have been updated and may differ from other publications. Readers should treat this report as a replacement of previous publications and avoid comparisons with tables in earlier publications.

POPULATION DATA

Mid-year population estimates for incorporated communities, local health areas, and health regions were provided by BC STATS, Ministry of Citizens' Services. In the mortality section of this report, a 'standard population' is used in the calculation of Age Standardized Mortality Rates (ASMR) and Potential Years of Life Lost Standardized Rates (PYLLSR). The Agency has used the 1991 Canadian Census population as the 'standard population' in the calculation of these age-standardized measures since 1998. Please refer to Standard Population in the Glossary for a more detailed description and the Methodology section for examples of computations of measures and statistical tests.

SPATIAL ANALYSIS AND MAPPING

This report presents regional analyses using data dissemination areas used by the Ministry of Health Services (Health Authority (HA), Health Service Delivery Area (HSDA), and Local Health Area (LHA)) and for incorporated communities (see Figures 1 and 2). This continues the practice established in 2001 and provides HAs with a consistent time series of health status indicators for their regions. Health care services are managed and delivered by five HAs that govern, plan, and coordinate services regionally within 16 HSDAs. The Interior Health Authority encompasses four HSDAs. Fraser, Vancouver Coastal, Vancouver Island, and Northern Health Authorities each consist of three HSDAs. HSDAs can be further divided into LHAs. Vital events are allocated to these data dissemination areas by the postal codes recorded on registration documents.

Marriages are assigned geographically by the postal code of the location where the marriage ceremony was performed; other vital events are assigned by the usual residence of the parents (for live births and stillbirths) or the decedent (for deaths).

Converting statistical data to maps can often reveal relationships that are not readily discernable in tabular form. The maps in this report present local health area data ranked by quintiles and allow easy visual examination of spatial patterns. Although statistics for all LHAs are presented in the maps, emphasis should be placed on those that are statistically significant. Maps have been included in the Vital Statistics Annual Reports since 1989 in order to disseminate relevant community level health information to the public and to local health service providers, planners, and educators. These allow communities to address their own specific health challenges and identify local health priorities. This can foster locally based solutions and more appropriate decision making.

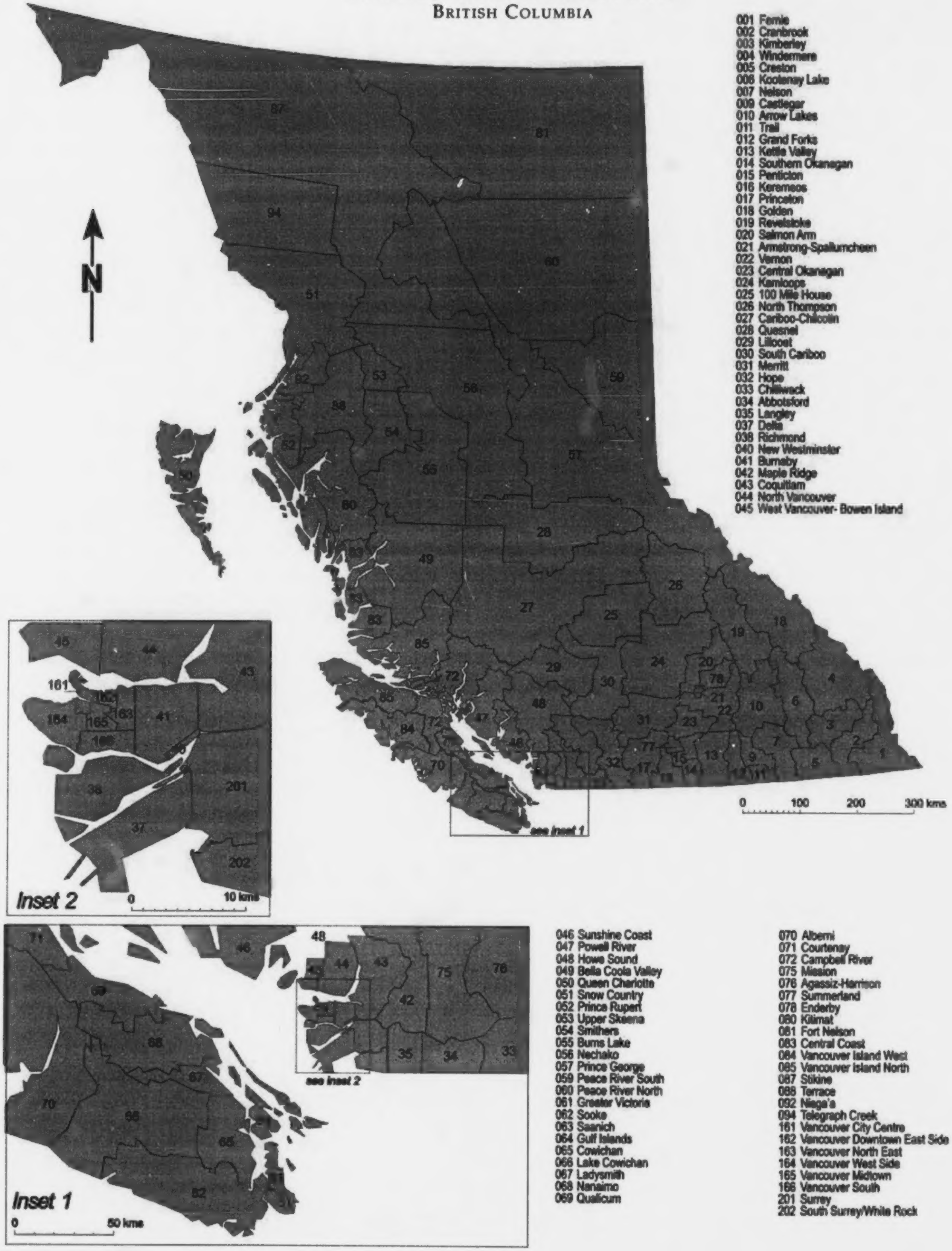
TERMS, METHODS, AND COMPUTATIONAL EXAMPLES

Readers are encouraged to refer to the Glossary for explanations of terms. The Methodology section provides examples of computations of measures and statistical tests.

FIGURE 1

LOCAL HEALTH AREA MAP

BRITISH COLUMBIA


001 Fernie
002 Cranbrook
003 Kimberley
004 Windermere
005 Creston
006 Kootenay Lake
007 Nelson
009 Castlegar
010 Arrow Lakes
011 Trail
012 Grand Forks
013 Kettle Valley
014 Southern Okanagan
015 Penticton
016 Keremeos
017 Princeton
018 Golden
019 Revelstoke
020 Salmon Arm
021 Armstrong-Spallumcheen
022 Vernon
023 Central Okanagan
024 Kamloops
025 100 Mile House
026 North Thompson
027 Cariboo-Chilcotin
028 Quesnel
029 Lillooet
030 South Cariboo
031 Merritt
032 Hope
033 Chilliwack
034 Abbotsford
035 Langley
037 Delta
038 Richmond
040 New Westminster
041 Burnaby
042 Maple Ridge
043 Coquitlam
044 North Vancouver
045 West Vancouver- Bowen Island
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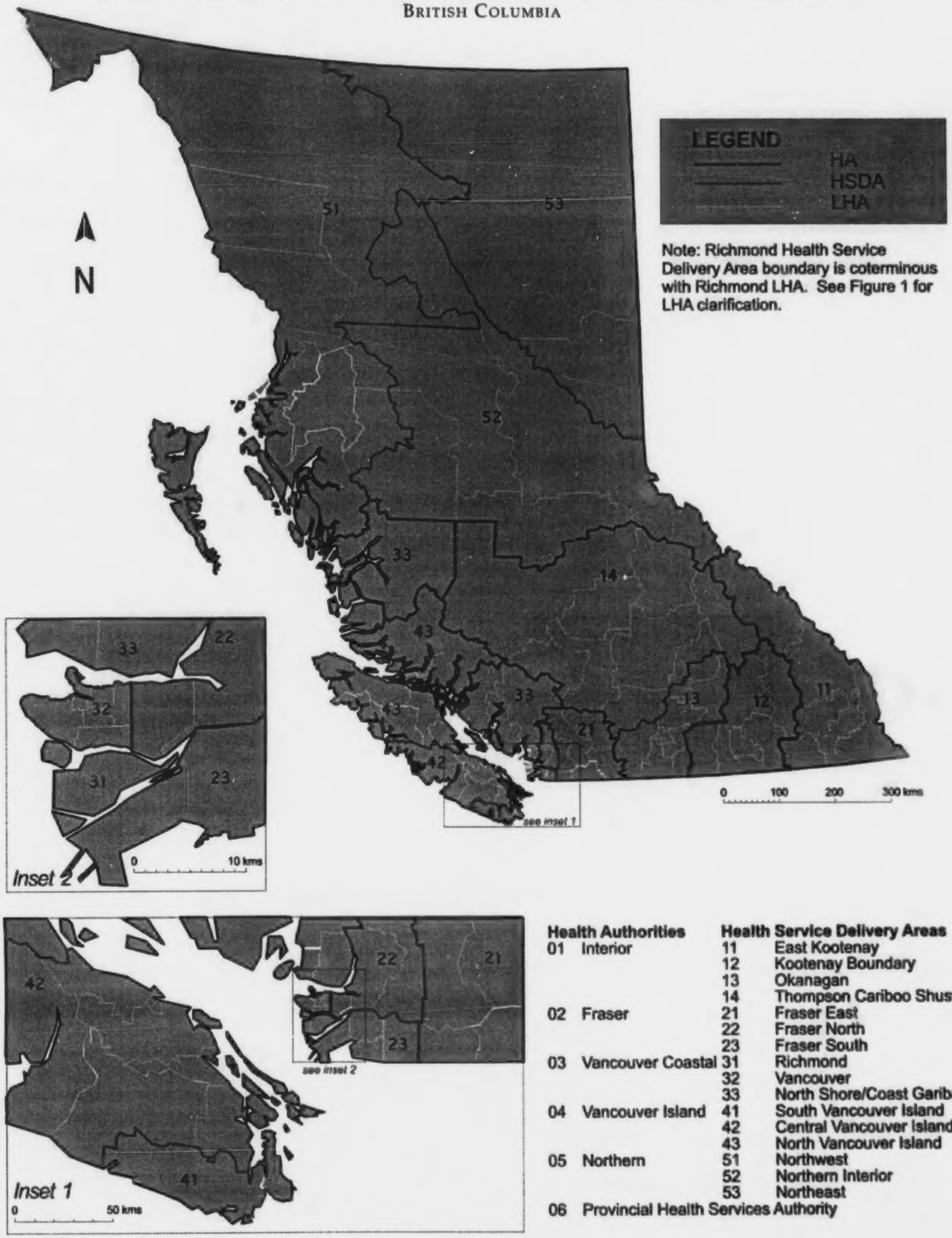
049 Bella Coola Valley
050 Queen Charlotte
051 Snow Country
052 Prince Rupert
053 Upper Skeena
054 Smithers
055 Burns Lake
056 Nechako
057 Prince George
059 Peace River South
060 Peace River North
061 Greater Victoria
062 Sooke
063 Saanich
064 Gulf Islands
065 Cowichan
066 Lake Cowichan
067 Ladysmith
068 Nanaimo
069 Qualicum
070 Alberni
071 Courtenay
072 Campbell River
075 Mission
076 Agassiz-Harrison
077 Summerland
078 Enderby
080 Kitimat
081 Fort Nelson
083 Central Coast
084 Vancouver Island West
085 Vancouver Island North
087 Stikine
088 Terrace
092 Nisga'a
094 Telegraph Creek
161 Vancouver City Centre
162 Vancouver Downtown East Side
163 Vancouver North East
164 Vancouver West Side
165 Vancouver Midtown
166 Vancouver South
201 Surrey
202 South Surrey/White Rock

FIGURE 2

HEALTH AUTHORITY & HEALTH SERVICE DELIVERY AREA MAP

BRITISH COLUMBIA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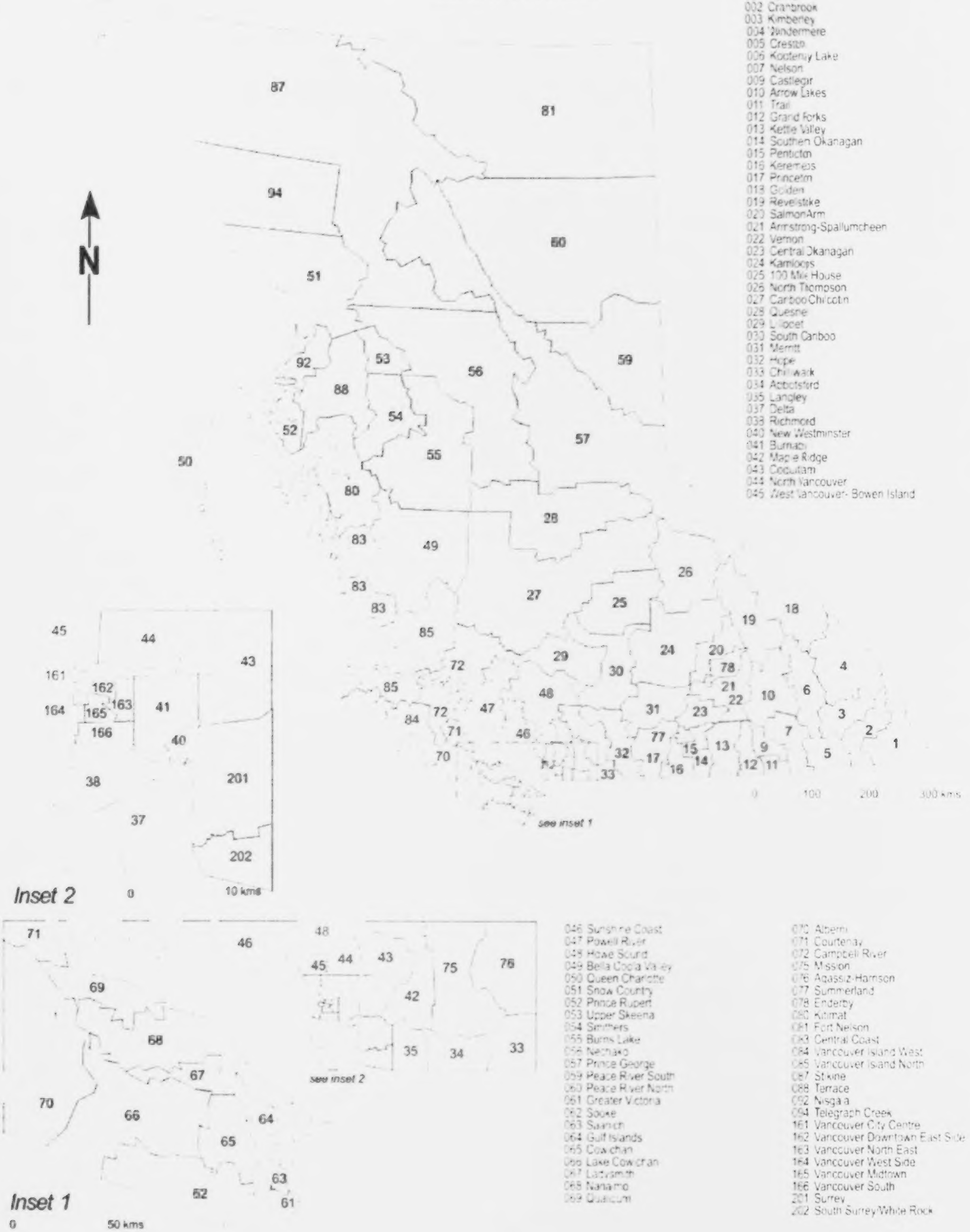
Note: Richmond Health Service Delivery Area boundary is coterminous with Richmond LHA. See Figure 1 for LHA clarification.

Health Authorities		Health Service Delivery Areas	
01	Interior	11	East Kootenay
		12	Kootenay Boundary
		13	Okanagan
		14	Thompson Cariboo Shuswap
02	Fraser	21	Fraser East
		22	Fraser North
		23	Fraser South
03	Vancouver Coastal	31	Richmond
		32	Vancouver
		33	North Shore/Coast Garibaldi
04	Vancouver Island	41	South Vancouver Island
		42	Central Vancouver Island
		43	North Vancouver Island
05	Northern	51	Northwest
		52	Northern Interior
		53	Northeast
06	Provincial Health Services Authority		

FIGURE 1
LOCAL HEALTH AREA MAP
BRITISH COLUMBIA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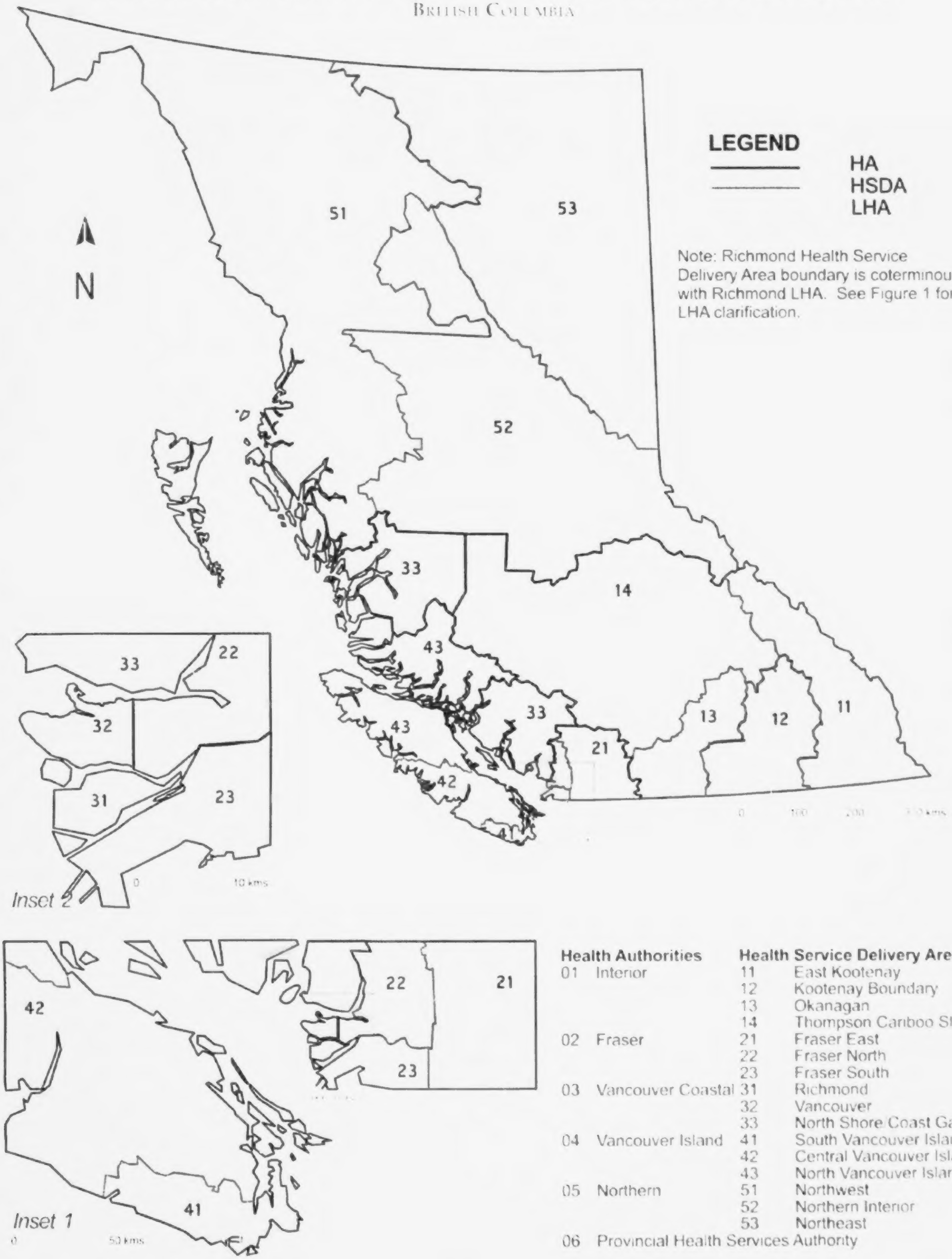
001	Fernie
002	Cranbrook
003	Kimberley
004	Windermere
005	Creston
006	Kootenay Lake
007	Nelson
009	Castlegar
010	Arrow Lakes
011	Trail
012	Grand Forks
013	Kettle Valley
014	Southern Okanagan
015	Penticton
016	Keremeos
017	Princeton
018	Golden
019	Revelstoke
020	SalmonArm
021	Armstrong-Spallumcheen
022	Vernon
023	Central Okanagan
024	Kamloops
025	100 Mile House
026	North Thompson
027	CaribooChilcotin
028	Quesnel
029	Lillooet
030	South Cariboo
031	Merritt
032	Hope
033	Chilliwack
034	Abbotsford
035	Langley
037	Delta
038	Richmond
040	New Westminster
041	Burnaby
042	Maple Ridge
043	Coquitlam
044	North Vancouver
045	West Vancouver- Bowen Island
046	Sunshine Coast
047	Powell River
048	Howe Sound
049	Bella Coola Valley
050	Queen Charlotte
051	Snow Country
052	Prince Rupert
053	Upper Skeena
054	Smithers
055	Burns Lake
056	Nechako
057	Prince George
059	Peace River South
060	Peace River North
061	Greater Victoria
062	Sooke
063	Saanich
064	Gulf Islands
065	Cowichan
066	Lake Cowichan
067	Ladysmith
068	Nanaimo
069	Qualicum
070	Alberni
071	Courtenay
072	Campbell River
075	Mission
076	Agassiz-Harrison
077	Summerland
078	Enderby
080	Kitimat
081	Fort Nelson
083	Central Coast
084	Vancouver Island West
085	Vancouver Island North
087	Stikine
088	Terrace
092	Nisga'a
094	Telegraph Creek
161	Vancouver City Centre
162	Vancouver Downtown East Side
163	Vancouver North East
164	Vancouver West Side
165	Vancouver Midtown
166	Vancouver South
201	Surrey
202	South Surrey/White Rock

FIGURE 2

HEALTH AUTHORITY & HEALTH SERVICE DELIVERY AREA MAP

BRITISH COLUMBIA


LEGEND
HA
HSDA
LHA
N
51
53
52
33
14
43
33
13
12
11
21
43
42
41
0 100 200 300 kms
33
22
32
31
23
0 10 kms
Inset 2
42
22
21
23
41
Inset 1
0 50 kms

Note: Richmond Health Service Delivery Area boundary is coterminous with Richmond LHA. See Figure 1 for LHA clarification.

Health Authorities		**Health Service Delivery Areas**	
01	Interior	11	East Kootenay
		12	Kootenay Boundary
		13	Okanagan
		14	Thompson Cariboo Shuswap
02	Fraser	21	Fraser East
		22	Fraser North
		23	Fraser South
03	Vancouver Coastal	31	Richmond
		32	Vancouver
		33	North Shore/Coast Garibaldi
04	Vancouver Island	41	South Vancouver Island
		42	Central Vancouver Island
		43	North Vancouver Island
05	Northern	51	Northwest
		52	Northern Interior
		53	Northeast
06	Provincial Health Services Authority		

Trends in Vital Events

Vital Statistics Information Box

On a Typical Day in British Columbia in 2009

122 LIVE BIRTHS OCCURRED IN THE PROVINCE TO BC RESIDENTS:

63 males and 59 females were born
4 were born to teenage mothers
28 were born to mothers aged 35 years old or more
4 were multiple births
37 were cesarean deliveries
7 were low birth weight babies
9 were pre-term
64 live births involved maternal complications
43 babies had perinatal complications
10 stillbirths every 10 days

86 DEATHS OCCURRED IN THE PROVINCE TO BC RESIDENTS:

44 males and 42 females died
67 deaths were seniors aged 65 years old or more including
- 44 deaths aged 80 years old or more

6 deaths every 10 days were children less than 15 years old including
- 4 infant deaths every 10 days

25 deaths were due to diseases of the circulatory system including
- 18 from cardiovascular disease
- 6 from cerebrovascular disease

24 deaths were due to malignant neoplasms (cancer) including
- 6 from malignant neoplasm of trachea and lung
- 3 from malignant neoplasm of colon and rectum
- 2 from malignant neoplasm of female breast

9 deaths were due to diseases of the respiratory system including
- 4 from pneumonia and influenza
- 4 from chronic pulmonary disease

2 deaths every 10 days were due to HIV disease
5 deaths were from external causes including
- 1 suicide
- 1 motor vehicle accident
- 1 unintentional fall

5 deaths were alcohol-related:
- 1 directly due to alcohol and 4 indirectly due to alcohol

1 death was drug-induced
17 deaths were attributed to smoking

62 MARRIAGES WERE SOLEMNIZED IN THE PROVINCE:

38 were civil ceremonies and 24 were performed by religious representatives
41 marriages were to couples where both parties were marrying for the first time
2 marriages every 10 days were to couples where both parties were teenagers

Trends Introduction

The tables and figures in this part of the Annual Report provide a long term historical review of birth, death, and marriage statistics during the past few decades. They provide a broad context for the recent vital event statistics shown in other parts of this report. Long term trends are always useful for evaluating recent events and trends, so the tables and figures are often cross referenced to related tables in subsequent parts of the report.

Overview

This section begins with a review of population, live birth, stillbirth, death, and marriage trends. This is followed by information on natural population increases and vital events by month.

Table 1 summarizes vital events that occurred from 1950-2009 and includes the mid-year BC populations. The BC population has shown a steady increase since 1950 so the columns indicating the rates are the most telling of indicators.

The rate of live births to residents increased steadily from 1950 to 1957 (as shown in Table 1). It levelled until 1960, and then dropped quite rapidly during the next ten years after which the decline moderated but generally continued until 2005. Between 2005 and 2007, there was a slight increase in the rate of live births over previous years but has remained fairly constant in more recent years. The mortality rate has declined from about ten per 1,000 population in 1950 to about seven per 1,000 in the mid 1980s and remained at about that level until 2009.

Marriage information pertains to all marriages solemnized in the province, not only those to residents. The marriage rate was about ten marriages per 1,000 British Columbians in 1950 but declined to about seven per 1,000 in 1960, then rose again to almost the 1950 rate by 1970. Since then, the marriage rate has declined to about five marriages per 1,000 population in 2009.

Regarding stillbirths, readers should be aware that there was a change in definition which led to the apparent 'jump' in numbers and rates in 1963. That change, and another in 1986, is explained under Stillbirth in the Glossary. Other than the increase in 1963 and irregularities due to small numbers of stillbirths, rates generally declined until the early 1990s and have fluctuated around seven per 1,000 total births until 2005. The rates since 2006 have increased from 7.99 to 9.46 in 2009.

Table 2 and Figure 4 show the rate of natural population increase (NPI) in BC and Canada since 1950. Natural population growth is explained in the Glossary. Not counting migration into or out of BC, the population grew "naturally" by 13,681 or at the rate of 3.1 per 1,000 British Columbians in 2009. BC's rate of NPI has been consistently below Canada's except for the first half of the 1980s. Both BC's and Canada's rates have gradually declined since the late 1950s.

Table 3 and Figure 5 show the number of live births, deaths, marriages, and stillbirths to residents according to the month in which they occurred. The number of marriages each month includes residents and non-residents. The percent columns show the monthly percent of all events to residents, except marriages which show the percent of all marriages. The table also includes the number of live births, deaths and stillbirths to non-residents.

There is continual speculation and anecdotal evidence that vital events tend to occur in particular months or seasons. The data presented in Table 3 and Figure 5 may not put an end to that speculation, but live births and deaths were pretty evenly distributed across the months and seasons in 2009. On the other hand, there was a clear preference to marry during the summer months. Although there were fluctuations in the number and percentage of stillbirths, due to the small number of events, no trend was apparent.

TABLE 1

LIVE BIRTHS, DEATHS, MARRIAGES AND STILLBIRTHS

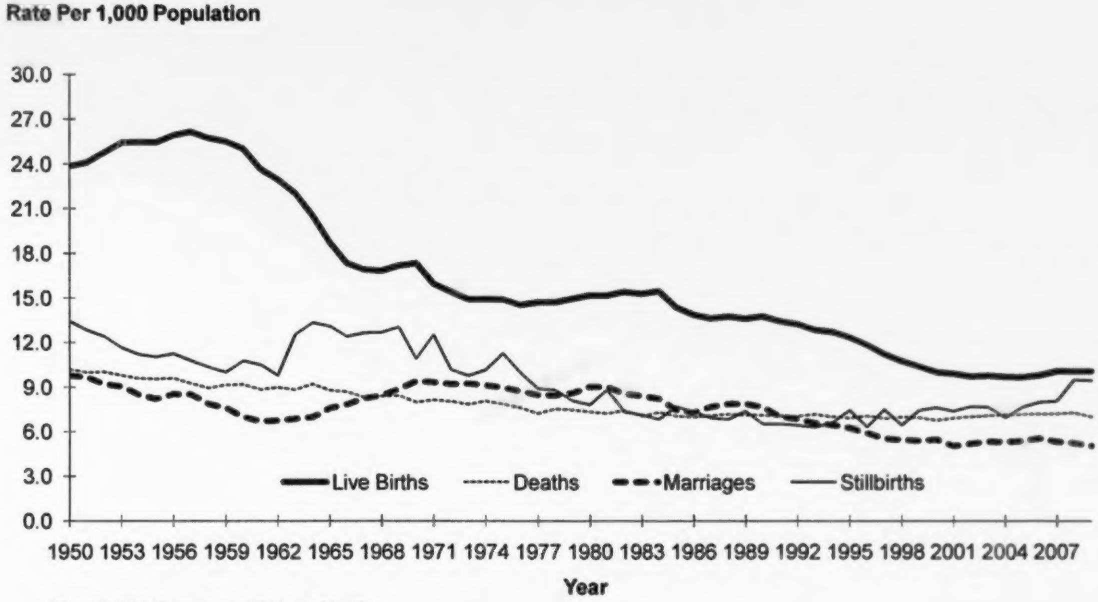
BRITISH COLUMBIA, 1950–2009

Year	Mid-year Population	Live Births		Deaths		Marriages		Stillbirths	
		Number	Rate	Number	Rate	Number	Rate	Number	Rate
1950	1,137,000	27,116	23.85	11,581	10.19	11,110	9.77	369	13.43
1951	1,165,210	28,077	24.10	11,638	9.99	11,272	9.67	365	12.83
1952	1,205,000	29,827	24.75	12,080	10.02	11,081	9.20	375	12.42
1953	1,248,000	31,746	25.44	12,218	9.79	11,298	9.05	375	11.67
1954	1,295,000	32,946	25.44	12,414	9.59	10,991	8.49	373	11.19
1955	1,342,000	34,138	25.44	12,816	9.55	11,011	8.20	381	11.04
1956	1,398,464	36,241	25.91	13,415	9.59	11,950	8.55	413	11.27
1957	1,482,000	38,744	26.14	13,711	9.25	12,620	8.52	422	10.77
1958	1,538,000	39,577	25.73	13,741	8.93	12,094	7.86	414	10.35
1959	1,567,000	39,971	25.51	14,336	9.15	11,910	7.60	404	10.01
1960	1,602,000	40,116	25.04	14,696	9.17	11,203	6.99	437	10.78
1961	1,629,100	38,591	23.69	14,403	8.84	10,935	6.71	410	10.51
1962	1,660,000	38,128	22.97	14,912	8.98	11,196	6.74	377	9.79
1963	1,699,000	37,478	22.06	15,029	8.85	11,677	6.87	476	12.54
1964	1,745,000	35,897	20.57	16,051	9.20	12,158	6.97	485	13.33
1965	1,797,000	33,669	18.74	15,784	8.78	13,639	7.59	447	13.10
1966	1,873,674	32,502	17.35	16,290	8.69	14,682	7.84	409	12.43
1967	1,945,000	32,899	16.91	16,170	8.31	16,026	8.24	422	12.66
1968	2,003,000	33,687	16.82	16,828	8.40	16,914	8.44	433	12.69
1969	2,060,000	35,383	17.18	17,377	8.44	18,284	8.88	468	13.05
1970	2,128,000	36,861	17.32	17,020	8.00	20,020	9.41	407	10.92
1971	2,184,620	34,852	15.95	17,783	8.14	20,389	9.33	442	12.52
1972	2,241,400	34,563	15.42	18,021	8.04	20,659	9.22	356	10.20
1973	2,302,400	34,352	14.92	18,095	7.86	21,303	9.25	339	9.77
1974	2,375,700	35,450	14.92	19,177	8.07	21,734	9.15	364	10.16
1975	2,433,200	36,281	14.91	19,151	7.87	21,824	8.97	414	11.28
1976	2,466,610	35,848	14.53	18,788	7.62	21,536	8.73	361	9.97
1977	2,493,800	36,691	14.71	18,021	7.23	21,156	8.48	330	8.91
1978	2,530,100	37,231	14.72	19,057	7.53	21,388	8.45	331	8.81
1979	2,571,200	38,432	14.95	19,204	7.47	22,087	8.59	313	8.08
1980	2,640,100	40,104	15.19	19,371	7.34	23,830	9.03	316	7.82
1981	2,744,470	41,679	15.19	19,857	7.24	24,694	9.00	371	8.82
1982	2,787,700	42,942	15.40	20,704	7.43	23,831	8.55	317	7.33
1983	2,813,800	43,047	15.30	19,895	7.07	23,692	8.42	310	7.15
1984	2,847,700	44,040	15.47	20,781	7.30	23,394	8.22	303	6.83
1985	2,990,000	42,989	14.38	21,131	7.07	22,270	7.45	333	7.69
1986	3,003,621	41,711	13.89	21,009	6.99	21,847	7.27	308	7.33
1987	3,048,651	41,610	13.65	21,618	7.09	23,418	7.68	291	6.94
1988	3,114,761	42,860	13.76	22,357	7.18	24,519	7.87	295	6.84
1989	3,196,725	43,586	13.63	22,786	7.13	25,179	7.88	324	7.38
1990	3,292,111	45,347	13.77	23,416	7.11	25,225	7.66	298	6.53
1991	3,373,787	45,345	13.44	23,820	7.06	23,667	7.01	298	6.53
1992	3,468,802	46,004	13.26	24,463	7.05	23,761	6.85	298	6.44
1993	3,567,772	45,920	12.87	25,604	7.18	23,482	6.58	292	6.32
1994	3,676,075	46,813	12.73	25,832	7.03	23,776	6.47	312	6.62
1995	3,777,390	46,672	12.36	26,225	6.94	23,637	6.26	350	7.44
1996	3,874,317	45,944	11.86	27,392	7.07	22,881	5.91	292	6.32
1997	3,948,583	44,384	11.24	27,264	6.90	21,884	5.54	335	7.49
1998	3,983,113	42,855	10.76	27,809	6.98	21,780	5.47	278	6.45
1999	4,011,375	41,728	10.40	27,893	6.95	21,629	5.39	313	7.45
2000	4,039,230	40,480	10.02	27,352	6.77	22,095	5.47	311	7.62
2001	4,076,264	40,376	9.91	28,242	6.93	20,575	5.05	301	7.40
2002	4,098,178	39,886	9.73	28,715	7.01	21,264	5.19	309	7.69
2003	4,122,396	40,292	9.77	29,157	7.07	21,984	5.33	311	7.66
2004	4,155,170	40,317	9.70	29,727	7.15	22,088	5.32	282	6.95
2005	4,196,788	40,647	9.69	30,100	7.17	22,637	5.39	314	7.67
2006	4,243,580	41,578	9.80	30,542	7.20	23,518	5.54	335	7.99
2007	4,309,453	43,481	10.09	31,120	7.22	22,974	5.33	354	8.08
2008	4,383,845	44,130	10.07	31,901	7.28	22,976	5.24	423	9.49
2009	4,455,207	44,908	10.08	31,227	7.01	22,469	5.04	429	9.46

FIGURE 3

CRUDE RATES OF LIVE BIRTHS, DEATHS, MARRIAGES AND STILLBIRTHS

BRITISH COLUMBIA, 1950–2009



Note: Stillbirth rate per 1,000 total births

Notes for Table 1

Rates shown for live births, deaths and marriages are crude rates per 1,000 population. Stillbirth rate is per 1,000 total births (live births plus stillbirths). The definition of a stillbirth was revised in 1963 and 1986 (see Glossary). Population information from BC Stats, Ministry of Citizens' Services. Above information includes late registrations and amendments. Gender unknown included. Non-residents are excluded from all data except marriages.

confidence interval
p value
birth rate
acquired immune deficiency syndrome
age standardization
population
total fertility rate
standardized mortality ratio
observed deaths

TABLE 2

NATURAL POPULATION INCREASES

BRITISH COLUMBIA AND CANADA, 1950–2009

Year	Rate B.C.	Rate Canada	Year	Rate B.C.	Rate Canada
1950	13.7	18.0	1980	7.9	8.3
1951	14.1	18.2	1981	8.0	8.0
1952	14.7	19.2	1982	8.0	7.9
1953	15.6	19.5	1983	8.2	7.8
1954	15.9	20.3	1984	8.2	7.8
1955	15.9	20.0	1985	7.3	7.5
1956	16.3	19.8	1986	6.9	7.2
1957	16.9	20.0	1987	6.6	7.0
1958	16.8	19.6	1988	6.6	7.0
1959	16.4	19.4	1989	6.5	7.4
1960	15.9	19.0	1990	6.7	7.7
1961	14.8	18.4	1991	6.4	7.4
1962	14.0	17.6	1992	6.2	7.1
1963	13.2	16.8	1993	5.7	6.4
1964	11.4	15.9	1994	5.7	6.1
1965	10.0	13.7	1995	5.4	5.7
1966	8.7	11.9	1996	4.8	5.2
1967	8.6	10.8	1997	4.3	4.4
1968	8.4	10.2	1998	3.8	4.1
1969	8.7	10.3	1999	3.4	3.8
1970	9.3	10.1	2000	3.3	3.9
1971	7.8	9.5	2001	3.0	3.5
1972	7.4	8.5	2002	2.7	3.4
1973	7.1	8.1	2003	2.7	3.4
1974	6.8	8.[illegible]	2004	2.5	3.4
1975	7.0	8.5	2005	2.5	3.4
1976	6.9	8.4	2006	2.6	3.7
1977	7.5	8.4	2007	2.9	3.9
1978	7.2	8.1	2008	2.8	4.0
1979	7.5	8.4	2009	3.1	4.0

Note: Rates shown are rates of natural population increase per 1,000 population. Canadian rates from Statistics Canada. Non-residents are excluded. Canadian rates from 2000 to 2009 are from BC Stats.

FIGURE 4

TRENDS OF NATURAL POPULATION GROWTH

BRITISH COLUMBIA AND CANADA, 1950–2009

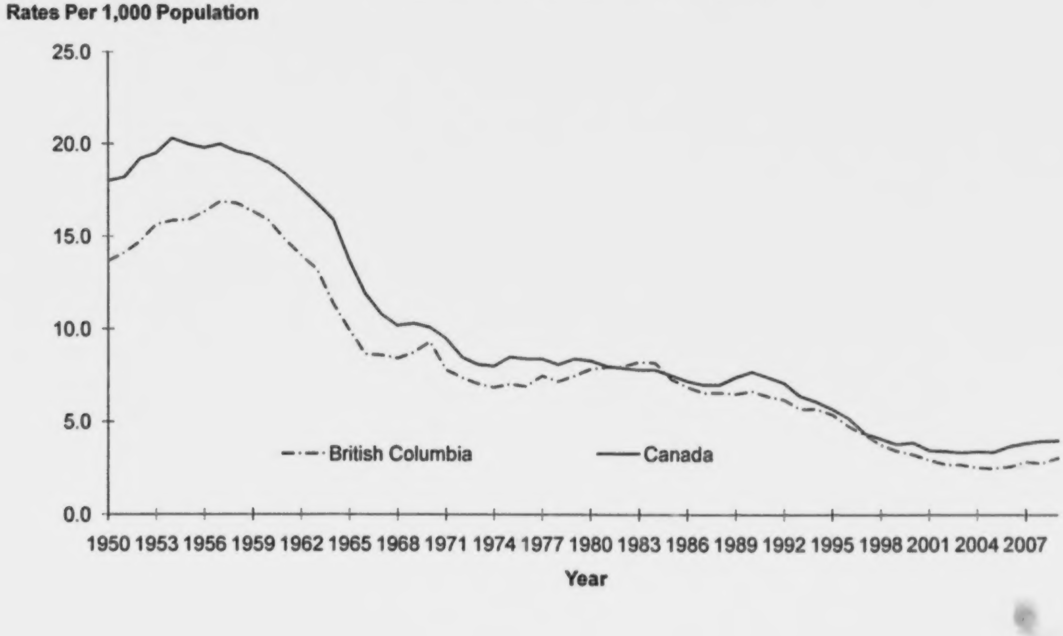


TABLE 3

LIVE BIRTHS, DEATHS, MARRIAGES AND STILLBIRTHS BY MONTH

BRITISH COLUMBIA, 2009

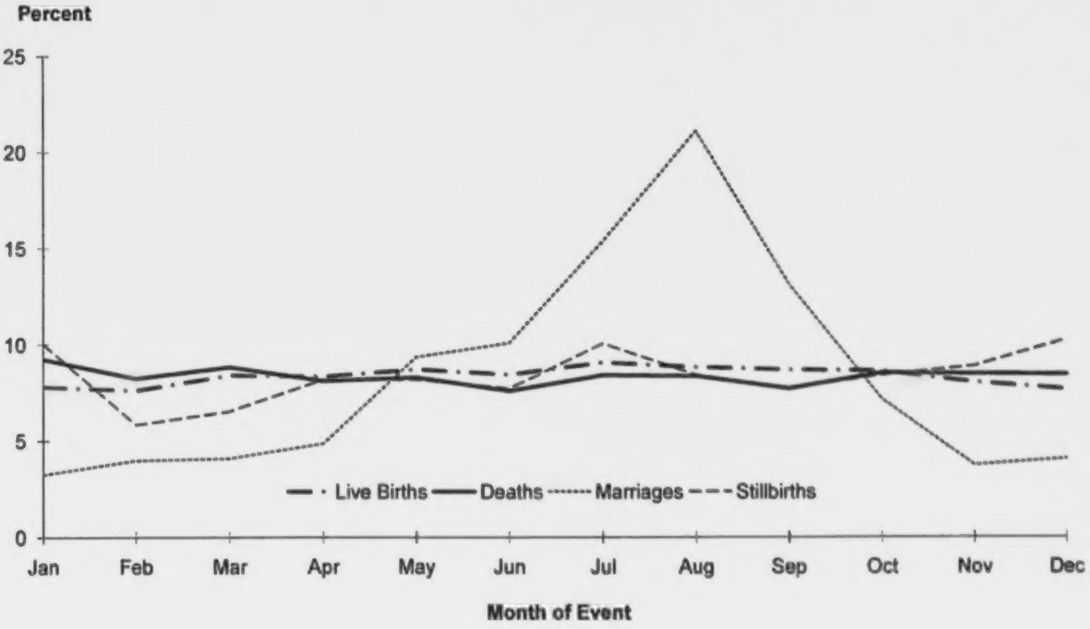
Month	Live Births		Deaths		Marriages		Stillbirths	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
January	3,502	7.8	2,883	9.2	729	3.2	43	10.0
February	3,414	7.6	2,568	8.2	893	4.0	25	5.8
March	3,770	8.4	2,753	8.8	917	4.1	28	6.5
April	3,735	8.3	2,528	8.1	1,089	4.8	35	8.2
May	3,898	8.7	2,585	8.3	2,095	9.3	35	8.2
June	3,776	8.4	2,365	7.6	2,260	10.1	33	7.7
July	4,063	9.0	2,617	8.4	3,448	15.3	43	10.0
August	3,952	8.8	2,601	8.3	4,736	21.1	36	8.4
September	3,895	8.7	2,402	7.7	2,947	13.1	33	7.7
October	3,862	8.6	2,654	8.5	1,604	7.1	36	8.4
November	3,602	8.0	2,639	8.5	838	3.7	38	8.9
December	3,439	7.7	2,632	8.4	913	4.1	44	10.3
Residents*	44,908	100.0	31,227	100.0	22,469	100.0	429	100.0
Non-residents	233		289		*		12	
TOTAL	45,141		31,516		22,469		441	

Note: Total percentage may not add up to 100 due to rounding.
*Marriage counts by month are based on event place and include non-residents.

FIGURE 5

LIVE BIRTHS, DEATHS, MARRIAGES AND STILLBIRTHS BY MONTH

BRITISH COLUMBIA, 2009



Fertility and Live Birth Trends

The Total Fertility Rate (TFR) in Table 4 is the number of births 1,000 women can expect during their child bearing years, that is, from 15 to 44 years of age. It is described more fully in the Glossary and an example of the calculation method is shown in the Methodology section.

The fertility rate in BC today is about half the 1950s rate. Shortly after World War II, fertility began to increase, commonly referred to as the post war baby boom. As shown in Table 4, fertility rates increased from 1950 to 1960 after which there was a sharp decline until the late 1970s. This declining trend continued more slowly, with some fluctuations, until 2002. Since then, the fertility rates have increased until 2007 and levelled off in recent years at approximately 100 more births per 1,000 women compared with the 2002 rates. Figure 6 shows the fertility rates for the last two decades. Fertility by LHA and among teenagers is analysed in Table 10 and Figure 29 respectively.

In addition to trends in Total Fertility Rates, this section discusses trends in maternal age, multiple births, low birth weight, and cesarean section deliveries.

Figure 7 shows annual percentages of live births to women in three age groups for the years 1986-2009. The oldest group (aged 35 years or more) is gradually increasing its percentage compared to the two younger groups (less than 20 years and 20 to 34 years old). The average age at which women are bearing children is increasing, but still about three quarters of live births are to women in the 20-34 years age group. Maternal age is related to other important birth characteristics and is a component of several tables in the birth related statistics section of this report.

As illustrated by Figure 8, the percentage of births that are multiple births has increased substantially between 1986 and 2009. Multiple birth infants have a higher risk of being preterm, having low birth weight, or suffering perinatal death or illness than singletons . Multiple birth infants accounted for 1.9 percent of all live births in 1986 and 3.2 percent in 2009. This was a statistically significant increase at the 95 percent level.

Figures 9 and 10 both illustrate the occurrence of Low Birth Weight (LBW) live births (those births with a birth weight of less than 2,500 grams) over the period 1986-2009. Figure 9 shows both the counts of such births and the rates per 1,000 live births for all mothers. Figure 10 shows the rate per 1,000 live births for mothers 35 years and older. While LBW rates increased gradually from 46.9 in 1986 to 55.6 per 1,000 live births in 2009. The rate in older mothers has increased more sharply from 44.9 in 1986 to 68.9 per 1,000 live births in 2009. The trend in each of these graphs is statistically significant at the 95 percent level.

Three relevant indicators are presented in Figures 11, 12, and 13. The upward trend in the cesarean section rates since 1986 (Figure 11) is statistically significant at the 95 percent level. The rates appear to have levelled slightly in the last couple of years. Cesarean sections by Health Service Delivery Area (HSDA) varied considerably in 2009 (Figure 12) from a low of 24.9 percent of live births to residents of HSDA 42 - Central Vancouver Island to a high of 33.1 percent of live births to residents of HSDA 14 - Thompson Cariboo Shuswap.

An important consideration regarding cesarean sections is the age of the mother. There were clear differences between age groups (Figure 13), with cesarean rates highest for mothers aged 35 or older and lowest for teen mothers. All age groups showed upward trends that were statistically significant at the 95 percent level. The difference between rates also appears to be increasing over the last two decades.

Cesarean deliveries are shown in relation to other modes of delivery in Table 11 and by LHA in Table 12 and Figure 30.

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[1] http://www.multiplebirthscanada.org/english/documents/low_birth_bro_final2005.pdf.

TABLE 4

TOTAL FERTILITY RATES

BRITISH COLUMBIA, 1950–2009

Year	Total Fertility Rate	Live Births	Year	Total Fertility Rate	Live Births
1950	3,074	27,116	1980	1,716	40,104
1951	3,201	28,077	1981	1,718	41,679
1952	3,327	29,827	1982	1,749	42,942
1953	3,542	31,746	1983	1,751	43,047
1954	3,656	32,946	1984	1,781	44,040
1955	3,748	34,138	1985	1,642	42,989
1956	3,875	36,241	1986	1,603	41,711
1957	3,921	38,744	1987	1,606	41,610
1958	3,900	39,577	1988	1,635	42,860
1959	3,958	39,971	1989	1,637	43,586
1960	3,949	40,116	1990	1,669	45,347
1961	3,785	38,591	1991	1,660	45,345
1962	3,709	38,128	1992	1,655	46,004
1963	3,564	37,478	1993	1,633	45,920
1964	3,284	35,897	1994	1,640	46,813
1965	2,710	33,669	1995	1,609	46,672
1966	2,442	32,502	1996	1,544	45,944
1967	2,307	32,899	1997	1,480	44,384
1968	2,228	33,687	1998	1,446	42,855
1969	2,223	35,383	1999	1,419	41,728
1970	2,185	36,861	2000	1,387	40,480
1971	1,994	34,852	2001	1,386	40,376
1972	1,890	34,563	2002	1,380	39,886
1973	1,751	34,352	2003	1,408	40,292
1974	1,735	35,450	2004	1,415	40,317
1975	1,682	36,281	2005	1,428	40,647
1976	1,618	35,848	2006	1,456	41,578
1977	1,636	36,691	2007	1,500	43,481
1978	1,620	37,231	2008	1,492	44,130
1979	1,721	38,432	2009	1,489	44,908

Note: Total Fertility Rate – Sum of age-specific fertility rates multiplied by the number of years in each age group (see Glossary for definition). Rates per 1,000 women age 15 to 44. Non-residents are excluded.

FIGURE 6

TOTAL FERTILITY RATES AND NUMBER OF LIVE BIRTHS

BRITISH COLUMBIA, 1986–2009

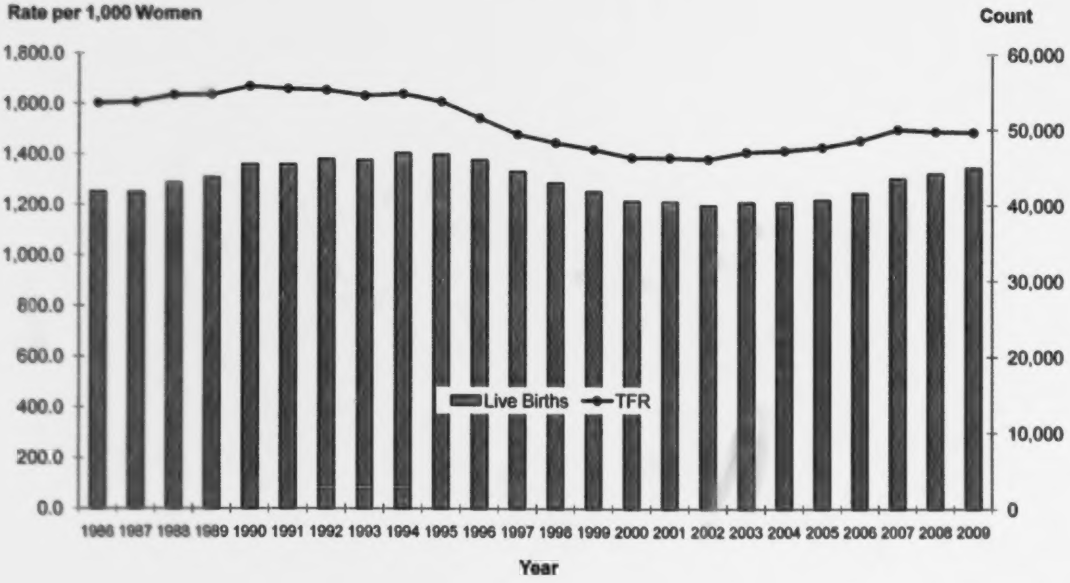


FIGURE 7
LIVE BIRTHS BY AGE OF MOTHER
BRITISH COLUMBIA, 1986–2009

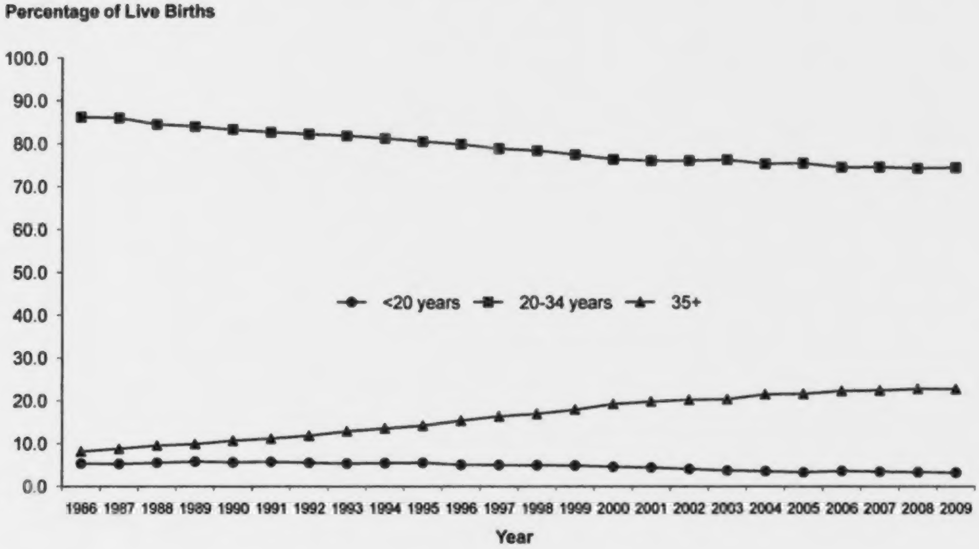


FIGURE 8
MULTIPLE BIRTHS AS A PERCENTAGE OF LIVE BIRTHS
BRITISH COLUMBIA, 1986–2009

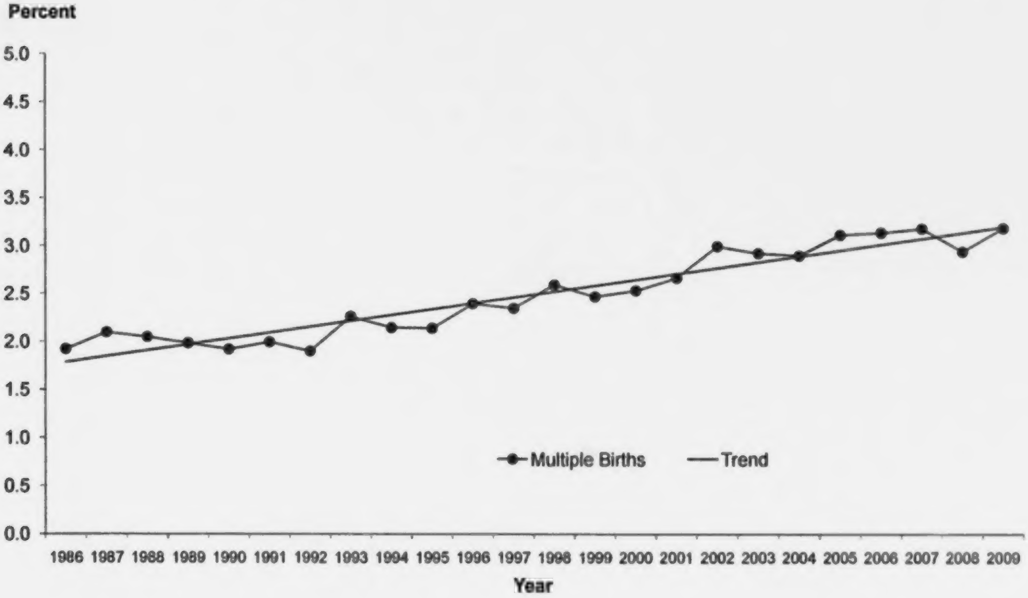


FIGURE 9
LOW BIRTH WEIGHT LIVE BIRTHS
BRITISH COLUMBIA, 1986–2009

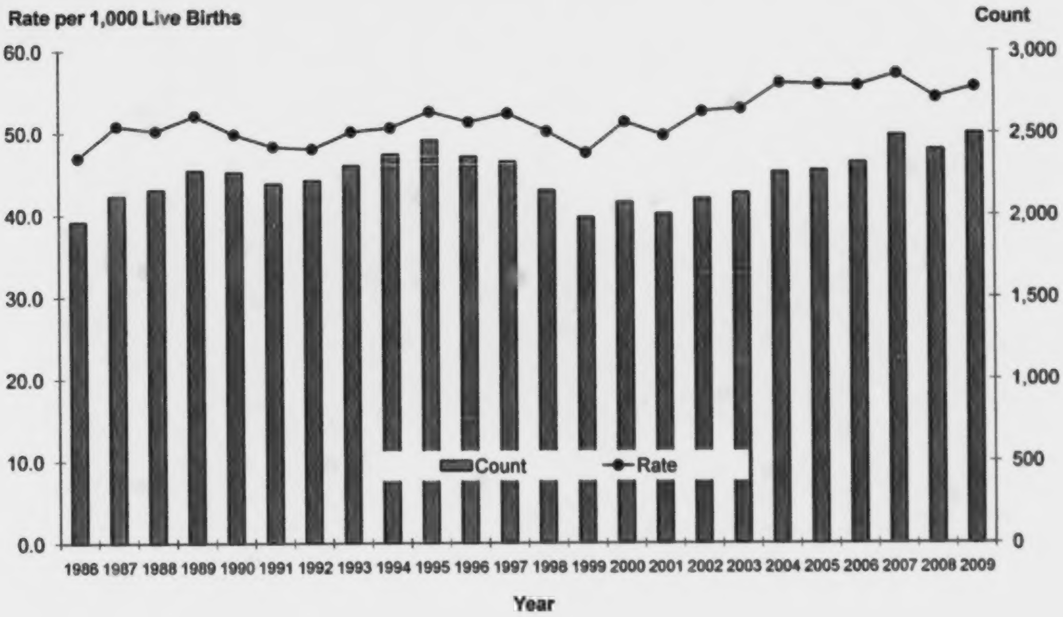


FIGURE 10
LOW BIRTH WEIGHT LIVE BIRTHS FOR MOTHERS AGED 35+
BRITISH COLUMBIA, 1986–2009

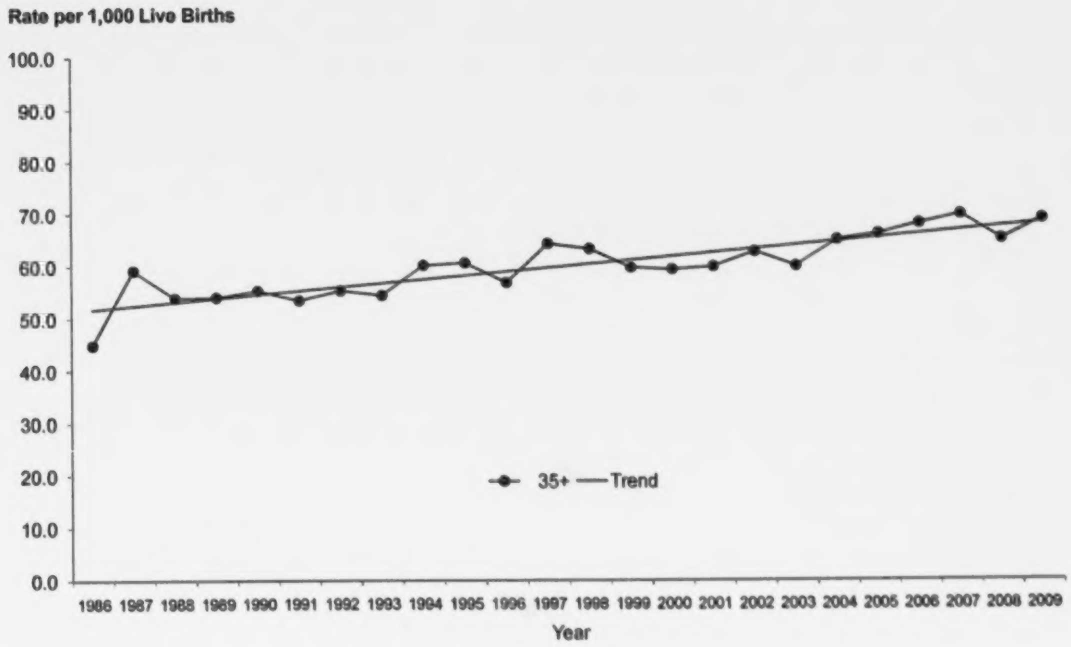


FIGURE 11
CESAREAN SECTIONS
BRITISH COLUMBIA, 1986–2009

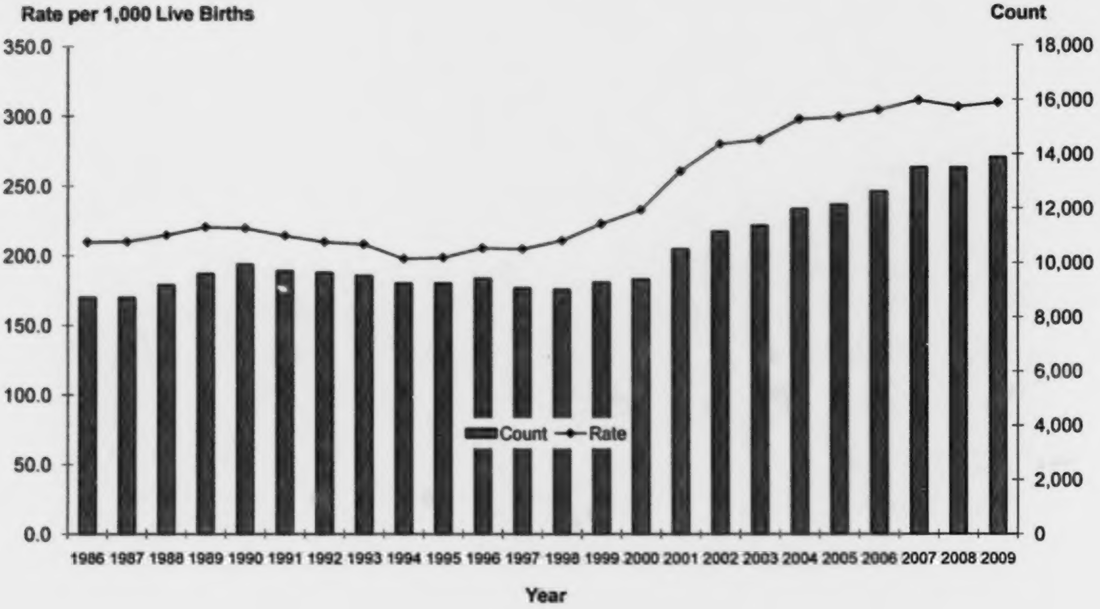


FIGURE 12
CESAREAN SECTIONS BY HEALTH SERVICE DELIVERY AREA
BRITISH COLUMBIA, 2009

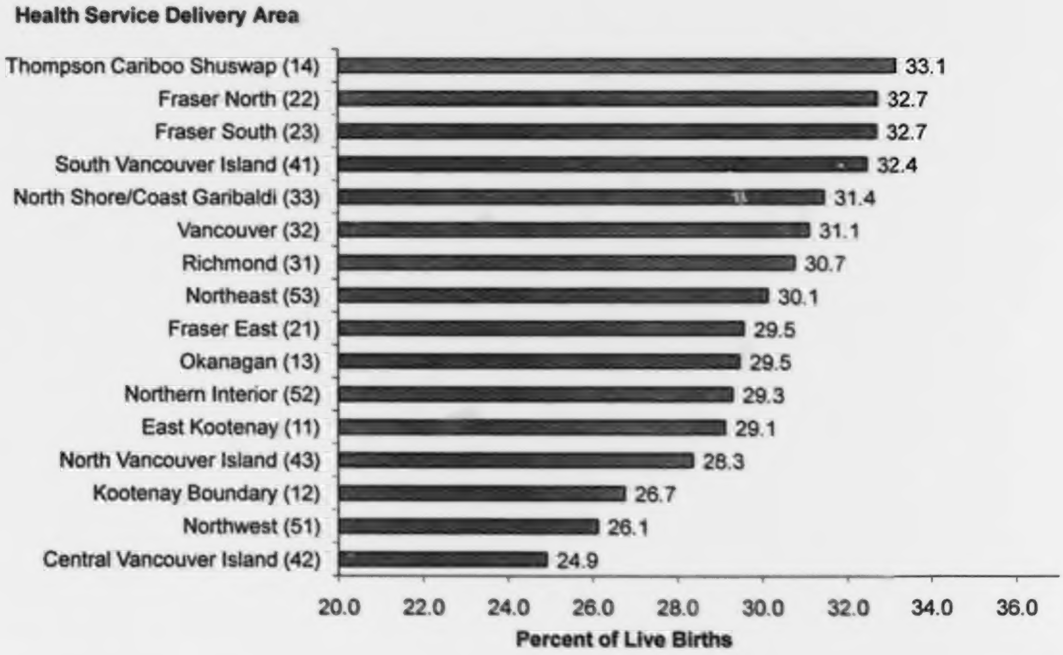
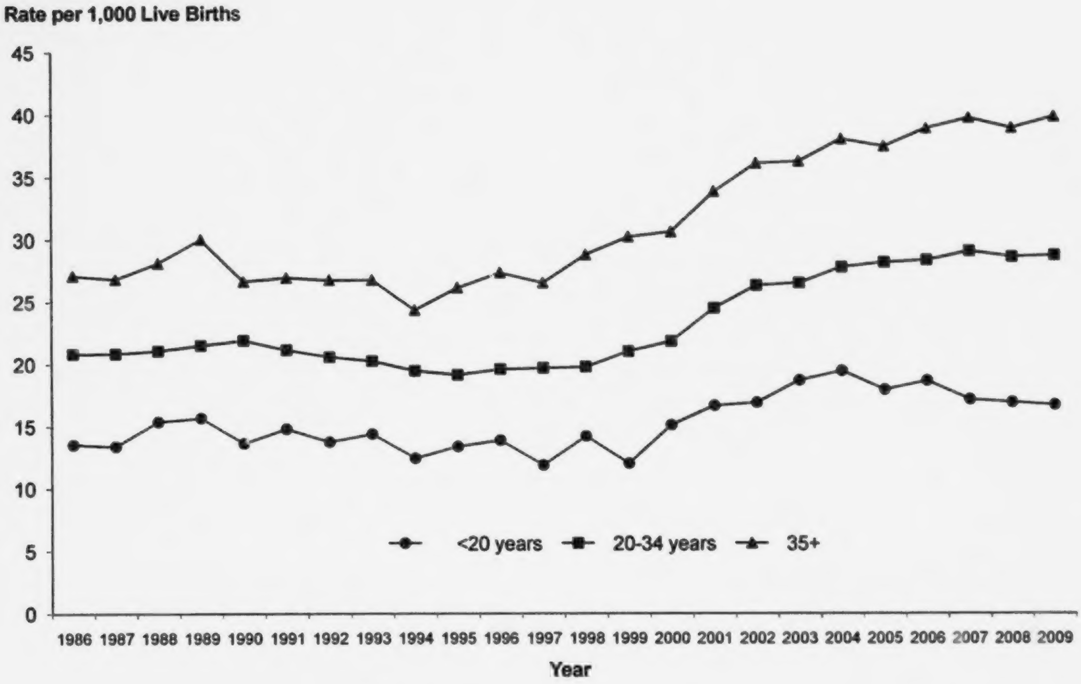


FIGURE 13

CESAREAN SECTIONS BY AGE OF MOTHER

BRITISH COLUMBIA, 1986–2009



Infant Mortality Trends

Table 5 shows the number of infants in BC who died before their first birthday in the years 1965-2009. Also shown are the rates at which these deaths occurred per 1,000 live births and similar rates for Canada. The infant death rate in Canada and BC decreased to around one fifth of the 1965 level by 2009. When these deaths are broken into three ranges according to the infant's age when the death occurred, it is clear that well over half of all infant deaths occur in the first six days of life. The Glossary defines the various divisions of infant deaths according to the infant's age.

For most of the time period covered by Table 5, there are comparable data at the Canadian level. Until 1991, Canada's and BC's infant mortality rates were similar. Since then, BC's rate of infant mortality has been lower than the overall Canadian rate.

Figure 14 clearly illustrates the downward trends in both the number and the rate of infant deaths over the past 20 years. Both trends are statistically significant at the 95 percent level.

Figures 15 and 16 show that historically infant mortality rates have been relatively high among teenage mothers, although only a small proportion (7.3 percent) of total infant deaths in 2009 were babies born to these young women. A downward trend in infant mortality rates in all age groups is seen in Figure 15. Each of these trends is statistically significant at the 95 percent level.

More information about infant mortality can be seen in the infant mortality section of death related statistics in this report.

FIGURE 14
INFANT MORTALITY
BRITISH COLUMBIA, 1986–2009

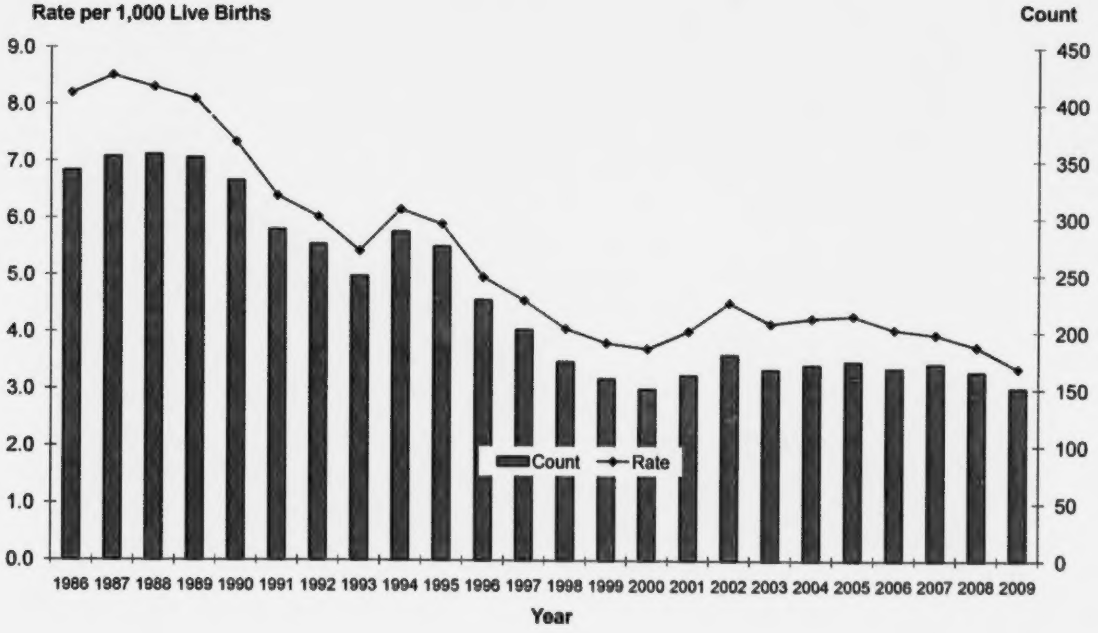


TABLE 5

INFANT MORTALITY

BRITISH COLUMBIA AND CANADA, 1965–2009

	British Columbia Age at Death (in Days)									Canada
	0–6 Days		0–27 Days		28–364 Days			Total		
Year	Number	Rate	Number	Rate	Number	Rate	N.S.	Number	Rate	Rate
1965	415	12.33	453	13.45	227	6.74	3	683	20.29	24.0
1966	435	13.38	494	15.20	263	8.09	4	761	23.41	23.1
1967	429	13.04	470	14.29	218	6.63	1	689	20.94	22.0
1968	375	11.13	438	13.00	214	6.35	4	656	19.47	21.0
1969	329	9.30	374	10.57	199	5.62	-	573	16.19	19.0
1970	369	10.01	416	11.29	193	5.24	2	611	16.58	19.0
1971	409	11.74	450	12.91	185	5.31	-	635	18.22	17.5
1972	322	9.32	373	10.79	195	5.64	1	569	16.46	17.0
1973	317	9.23	363	10.57	185	5.39	3	551	16.04	16.0
1974	310	8.74	348	9.82	196	5.53	2	546	15.40	15.0
1975	278	7.66	321	8.85	169	4.66	1	491	13.53	14.3
1976	292	8.15	324	9.04	152	4.24	2	478	13.33	13.5
1977	246	6.70	276	7.52	200	5.45	-	476	12.97	12.4
1978	245	6.58	286	7.68	178	4.78	-	464	12.46	12.0
1979	196	5.10	239	6.22	167	4.35	-	406	10.56	10.9
1980	188	4.69	235	5.86	186	4.64	-	421	10.50	10.4
1981	232	5.57	259	6.21	140	3.36	3	402	9.65	9.6
1982	217	5.05	251	5.85	150	3.49	-	401	9.34	9.1
1983	193	4.48	212	4.92	145	3.37	2	359	8.34	8.5
1984	184	4.18	205	4.65	150	3.41	1	356	8.08	8.1
1985	180	4.19	198	4.61	133	3.09	-	331	7.70	8.0
1986	164	3.93	195	4.68	147	3.52	-	342	8.20	7.9
1987	158	3.80	194	4.66	160	3.85	-	354	8.51	7.3
1988	191	4.46	220	5.13	136	3.17	-	356	8.31	7.2
1989	186	4.27	215	4.93	138	3.17	-	353	8.10	7.3
1990	183	4.04	221	4.87	112	2.47	-	333	7.34	6.8
1991	140	3.09	164	3.62	126	2.78	-	290	6.40	6.4
1992	153	3.33	173	3.76	104	2.26	-	277	6.02	6.1
1993	121	2.64	139	3.03	110	2.40	-	249	5.42	6.3
1994	175	3.74	198	4.23	90	1.92	-	288	6.15	6.3
1995	158	3.39	181	3.88	94	2.01	-	275	5.89	6.1
1996	133	2.89	160	3.48	68	1.48	-	226	4.96	5.6
1997	125	2.82	146	3.29	56	1.26	-	202	4.55	5.5
1998	94	2.19	114	2.66	60	1.40	-	174	4.06	5.3
1999	87	2.09	108	2.59	51	1.22	-	159	3.81	5.3
2000	84	2.08	105	2.59	45	1.11	-	150	3.71	5.3
2001	103	2.55	126	3.12	36	0.89	-	162	4.01	5.2
2002	98	2.46	126	3.16	54	1.35	-	180	4.51	5.4
2003	104	2.58	120	2.98	47	1.17	-	167	4.14	5.3
2004	108	2.68	122	3.03	49	1.22	-	171	4.24	5.3
2005	104	2.56	124	3.05	50	1.23	-	174	4.28	5.4
2006	83	2.00	118	2.84	50	1.20	-	168	4.04	5.0
2007	98	2.25	114	2.62	58	1.33	-	172	3.96	5.1
2008	87	1.97	107	2.42	58	1.31	-	165	3.74	*
2009	90	2.00	103	2.29	48	1.07	-	151	3.36	*

Note: Rates per 1,000 live births in the specified year.
N.S. – Not stated.
Above information includes late registrations and amendments.
Canadian rates from Statistics Canada.
*Rates were not available.
Non-residents are excluded.

Figure 15

INFANT MORTALITY BY AGE OF MOTHER

British Columbia, 1986–2009

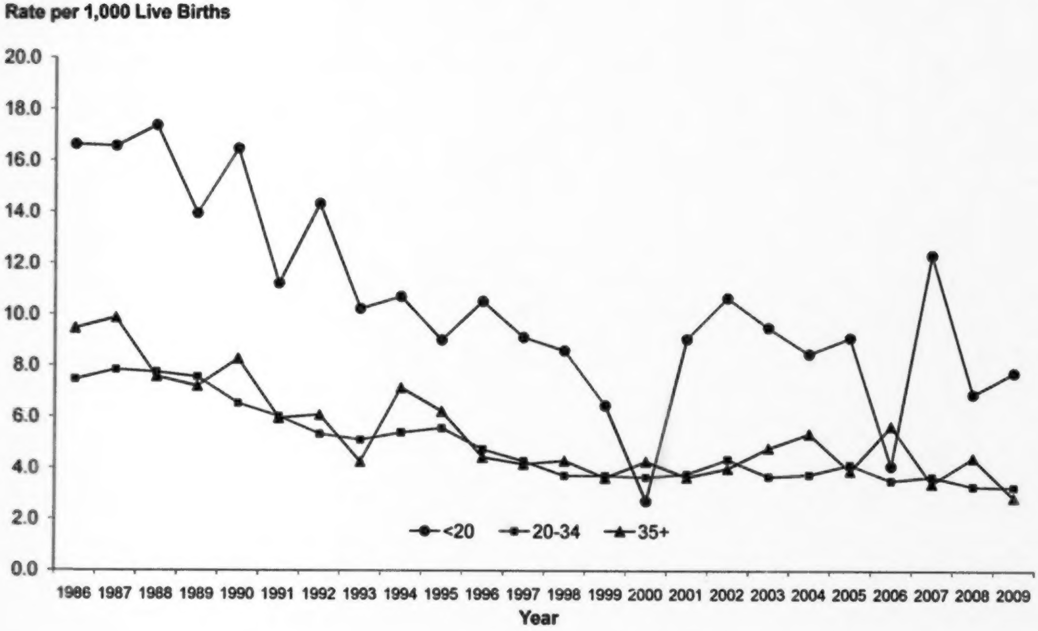
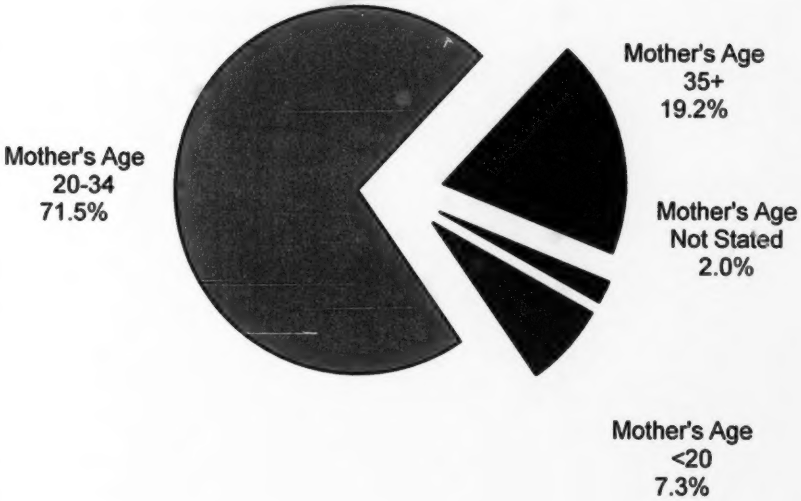


Figure 16

PERCENTAGE OF INFANT MORTALITY BY AGE OF MOTHER

British Columbia, 2009



Death Trends

This section begins with an examination of counts and rates for all causes of death since 1986. This is followed by information on the average age at death, and cause of death trends for malignant neoplasms (cancer), endocrine, nutritional and metabolic diseases, nervous system diseases, cardiovascular diseases, cerebrovascular diseases, and motor vehicle accidents.

Note that all causes are based on the Underlying Cause of Death (UCOD), which is explained in the Glossary. While other causes may have contributed to the death, the underlying cause is defined as the condition or injury that initiated the train of events leading directly to death.

While Figure 17 shows an increase in the absolute number of deaths from 1986 to 2009, the standardized rate has been steadily declining. The provincial Age-Standardized Mortality Rate (ASMR) has been on a downward trend since 1986. The trend is not only statistically significant at the 95 percent level, but reached a historic low in 2009.

The rates are quoted per 10,000 population and have been age-standardized to the 1991 Canada census population distribution. See the Glossary for an explanation of ASMR and the Methodology section for an example of the calculation method.

Figure 18 shows that the average age at death among British Columbians has reached an all time high in 2009 at 76.0 years. The trend indicates an increase over the 1986 to 2009 time period, and this trend is statistically significant at the 95 percent level. It should be noted that average age at death is the arithmetic average of the ages at which people died and is not equivalent to Life Expectancy which is explained in the Glossary.

Figures 19 through 27 refer to selected major causes of death categories. Figures 19, 20, and 21 illustrate trends in cancer death and rates. The death rates are expressed as ASMRs.

Figure 19 shows that in the years 1986 to 2009, while the number of deaths due to all types of cancer (malignant neoplasms, ICD-10 codes C00-C97) steadily climbed, the ASMR has fallen. Thus, while cancer death incidence climbed, the size of the British Columbian population climbed at an even faster pace.

Figure 20 is a similar graph showing incidence and death rates due to lung cancer (malignant neoplasms of trachea and lung, ICD-10 codes C33-C34). The lung cancer death rate in BC has been falling while the number of lung cancer deaths has increased since 1986.

Figure 21 provides further detail by gender for the lung cancer information shown in Figure 20. The falling trend in lung cancer deaths overall is being driven by the strong decline in lung cancer deaths among men, as there is a gradually increasing trend in the rate of lung cancer deaths among women. The declining trend in lung cancer deaths among men and the increasing trend in lung cancer deaths in women are both statistically significant at the 95 percent level. Deaths due to cancer are shown in the context of other causes of death in tables 21, 22, and 23 in the death-related statistics section of this report.

Deaths due to endocrine, nutritional and metabolic diseases in Figure 22 (ICD-10 codes E00-E89) include diseases such as diabetes and cystic fibrosis. A comprehensive list of diseases in this category is provided in Appendix 2 - Detailed Cause of Death by Age and Gender. The death rates and counts for these conditions increased during the period from 2000 to 2005 with a decline between 2006 and 2009.

Diabetes mellitus mortality in 2009, as shown in Figure 23, is 2.9 times that of 1986 in absolute terms, but the ASMR is only 1.3 times greater over the period. The rate in 2009 has dropped down to the levels shown in the year 2000.

Deaths due to diseases of the nervous system are shown in Figure 24 and include causes such as Alzheimer's disease, Parkinson's disease, and multiple sclerosis. A comprehensive list of diseases in this category appears in Appendix 2 under ICD-10 codes G00-G99. The number and rate of these deaths increased between 1986 and 2001. From 2001 to 2005, the number levelled off and the rate declined followed by a slight increase for both the number and rate through to 2008. In 2009, while the number of deaths remains consistent, the rate has dropped to the 2005 level. The increasing overall trend from 1986 to 2009 was statistically significant at the 95 percent level.

Figure 25 shows numbers of cardiovascular disease deaths (ICD-10 codes I00-I51) and death rates per 10,000 standard population from 1986 to 2009. While the incidence numbers rose from 1986 to 1996 and then generally declined, the death rate has been steadily falling since 1986. This declining trend is statistically significant at the 95 percent level. See Tables 22 and 23 to compare cardiovascular disease deaths in the context of other causes of death.

Cerebrovascular diseases shown in Figure 26 include ICD-10 codes I60-I69. While the number of people dying from these diseases increased, the standardized rate gradually decreased between 1986 and 2009. This decreasing ASMR trend is statistically significant at the 95 percent level.

In Figure 27, the incidence and death rates for motor vehicle accidents over the period 1986 to 2009 declined. The downward ASMR trend is statistically significant at the 95 percent level. Although motor vehicle deaths have accounted for about 1.3 percent of all deaths on average since 2000, a substantial share of deaths due to motor vehicle accidents are among young British Columbians, and as such, they remain a concern (see Tables 34 and 35).

Coroners' investigations into "externally caused" deaths can be lengthy, resulting in delays in determining the final causes. For this reason, recent year counts and rates may be underestimated and therefore should be interpreted with caution.

FIGURE 17

DEATHS AND DEATH RATES, ALL CAUSES OF DEATH

BRITISH COLUMBIA, 1986–2009

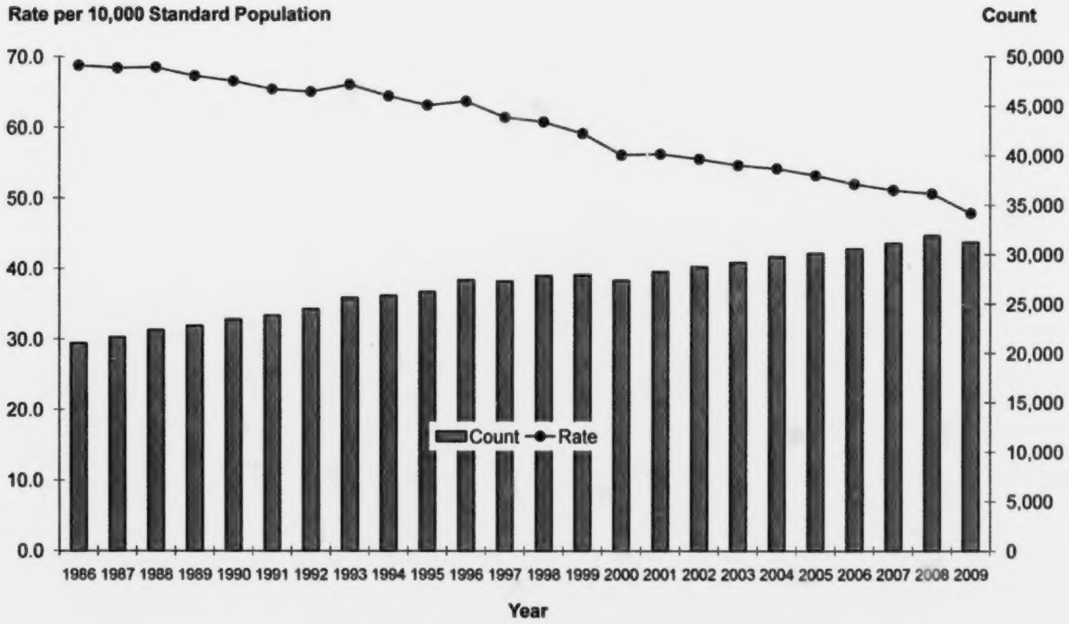
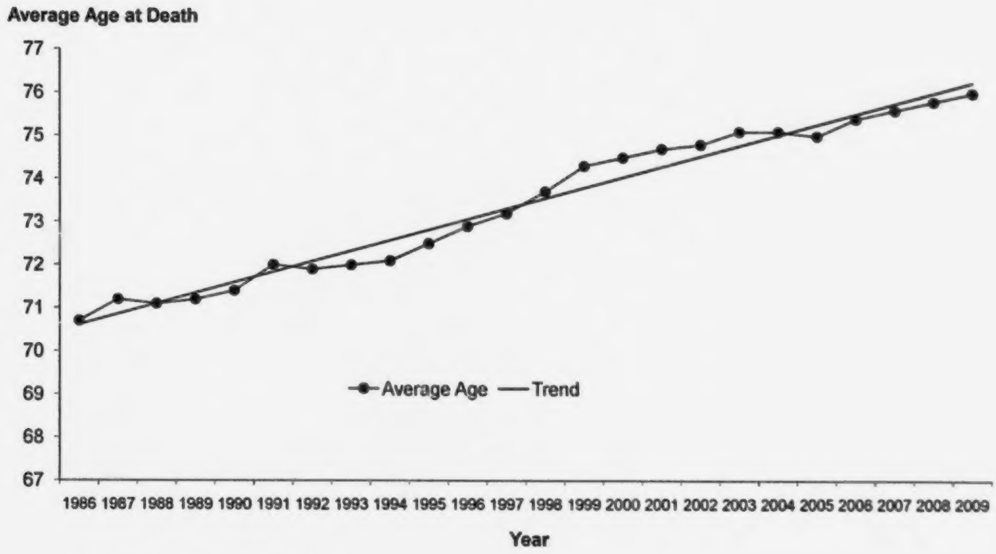


FIGURE 18
AVERAGE AGE AT DEATH
BRITISH COLUMBIA, 1986–2009



Based on 5 year age groups to 85+

FIGURE 19
DEATHS AND DEATH RATES, MALIGNANT NEOPLASMS (CANCER)
BRITISH COLUMBIA, 1986–2009

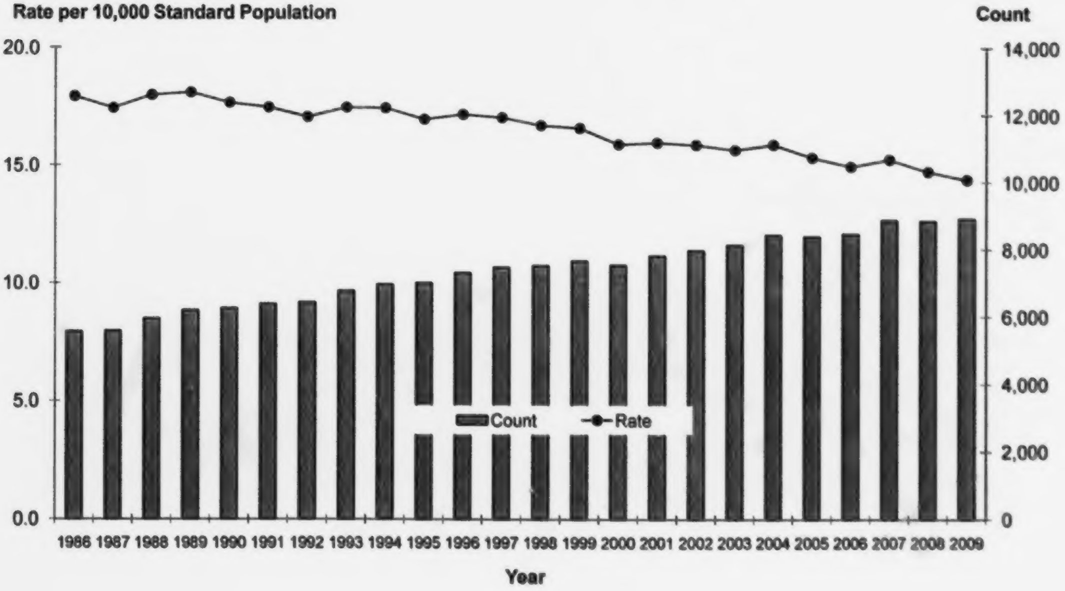


FIGURE 20

DEATHS AND DEATH RATES, MALIGNANT NEOPLASM OF LUNG

BRITISH COLUMBIA, 1986-2009

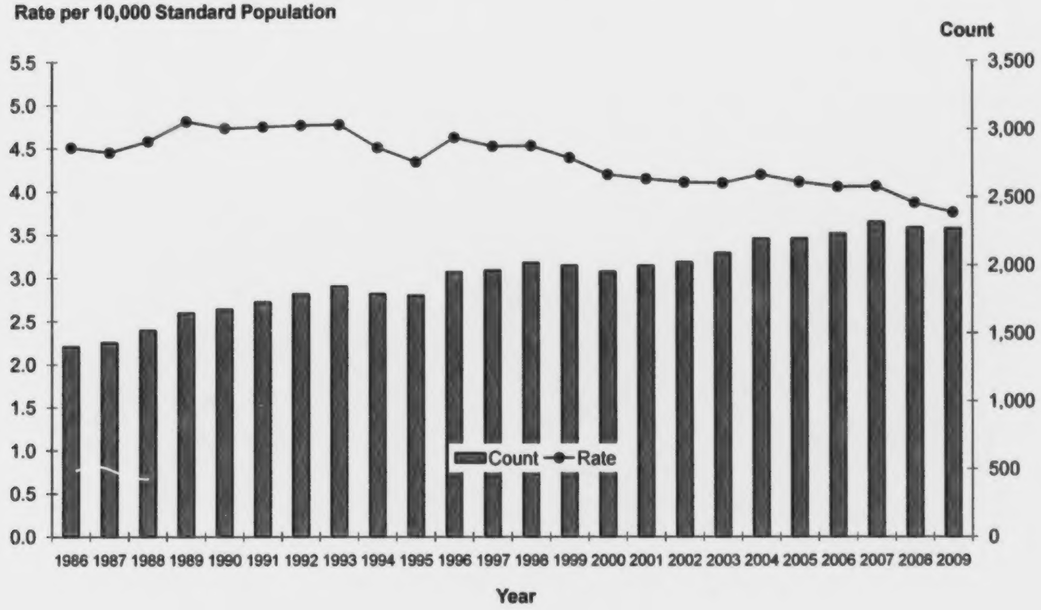


FIGURE 21

DEATH RATES BY GENDER, MALIGNANT NEOPLASM OF LUNG

BRITISH COLUMBIA, 1986-2009

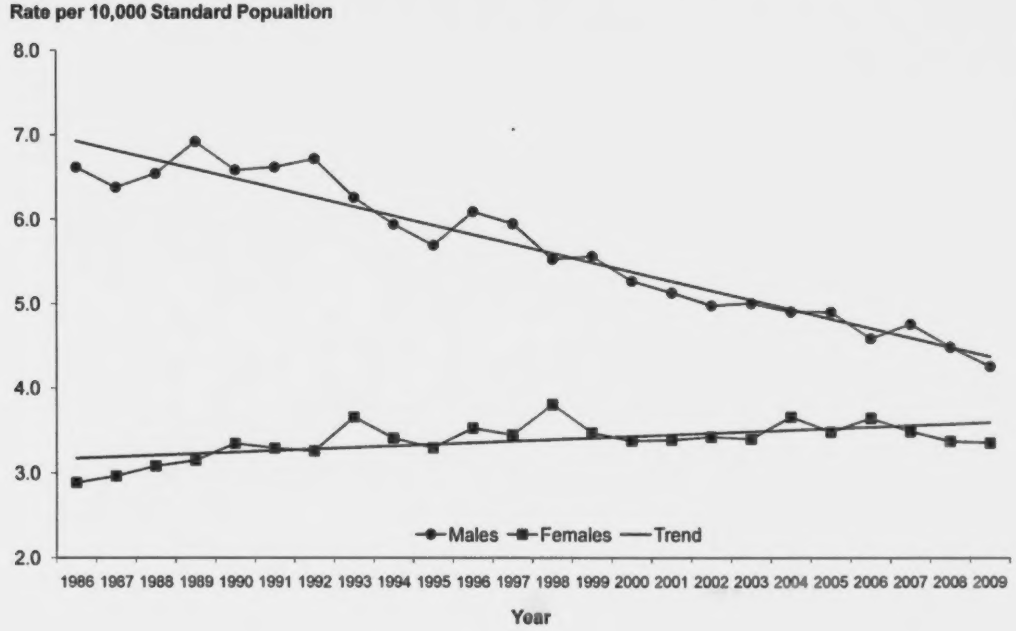


FIGURE 22

DEATHS AND DEATH RATES, ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES

BRITISH COLUMBIA, 1986-2009

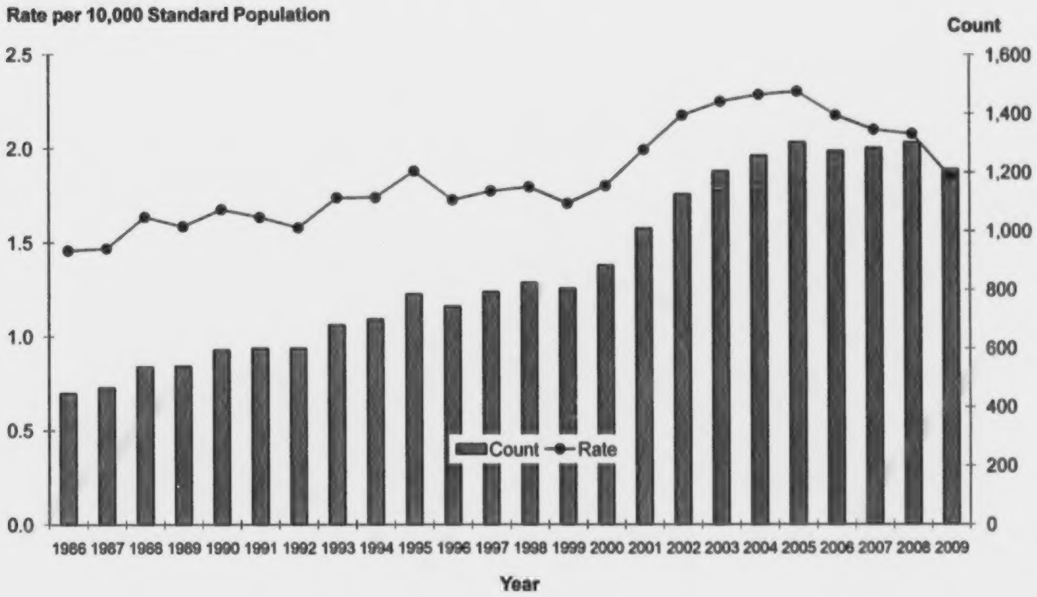


FIGURE 23

DEATHS AND DEATH RATES, DIABETES MELLITUS

BRITISH COLUMBIA, 1986–2009

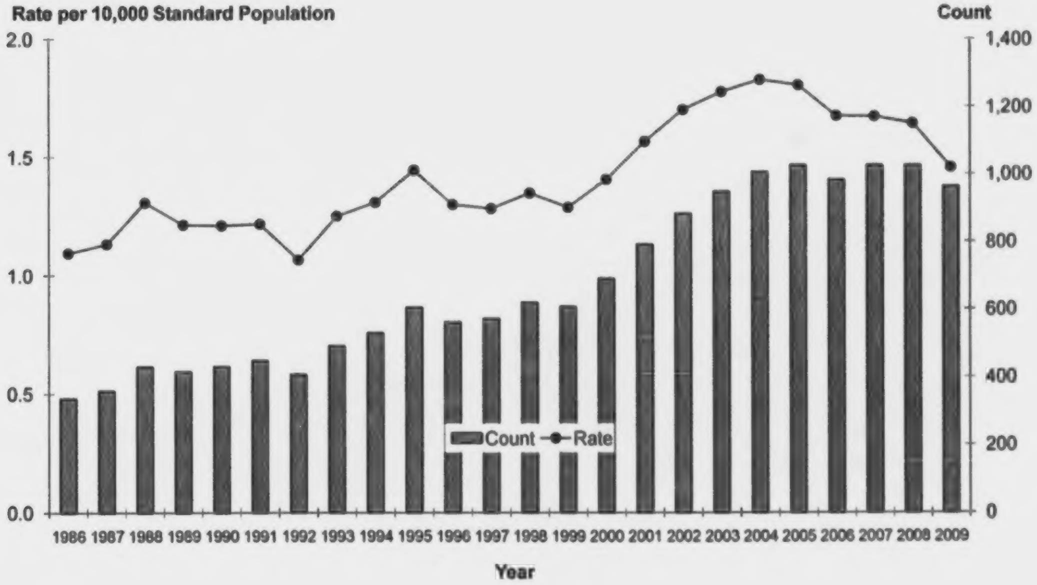


FIGURE 24

DEATHS AND DEATH RATES, NERVOUS SYSTEM DISEASES

BRITISH COLUMBIA, 1986-2009

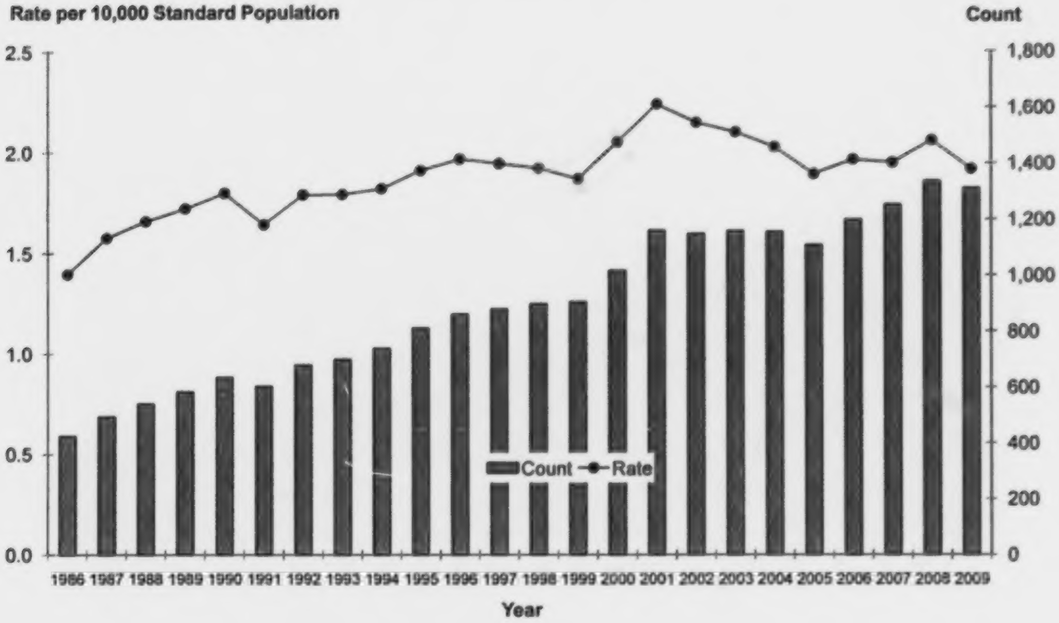


FIGURE 25

DEATHS AND DEATH RATES, CARDIOVASCULAR DISEASE

BRITISH COLUMBIA, 1986-2009

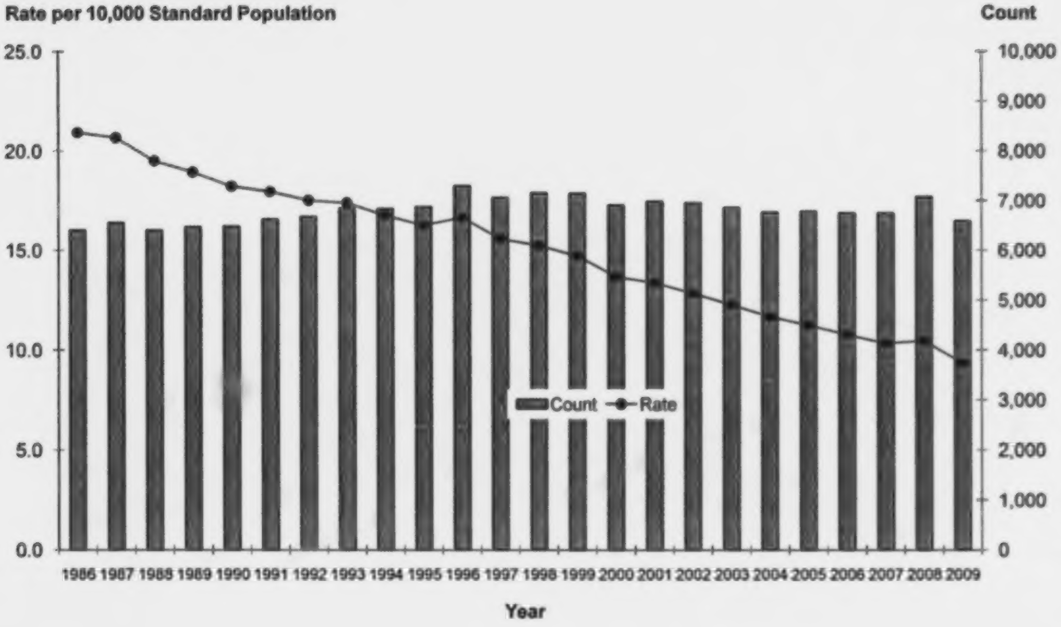


FIGURE 26

DEATHS AND DEATH RATES, CEREBROVASCULAR DISEASES

BRITISH COLUMBIA, 1986-2009

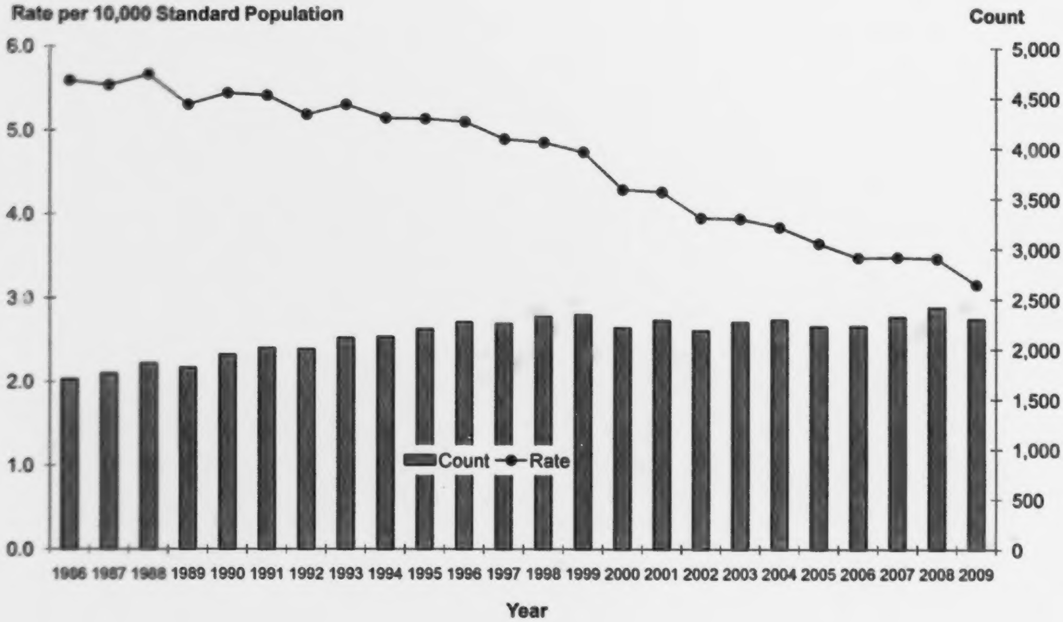
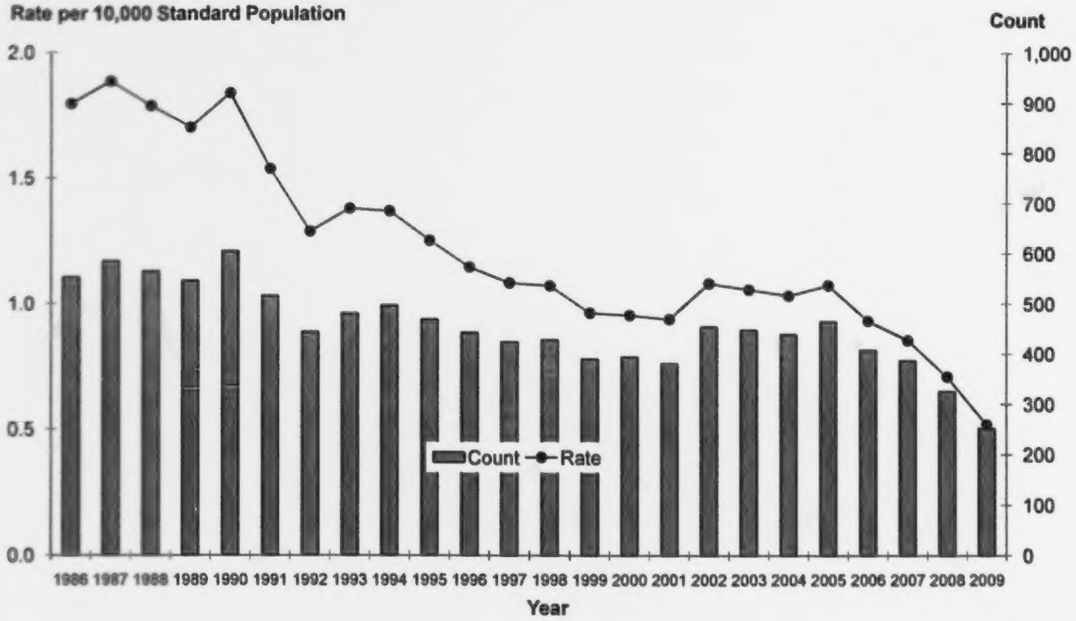


FIGURE 27

DEATHS AND DEATH RATES, MOTOR VEHICLE ACCIDENTS

BRITISH COLUMBIA, 1986–2009



Marriage Trends

Table 6 and Figure 28 display the average age at which men and women get married. Between 1977 and 2009, the average age for first marriages increased by 5.8 years for men and by 6.5 years for women.

The average age for all marriages increased from 29.3 years to 35.4 years for men and from 26.2 years to 32.8 years for women over the last 32 years.

Over that same time period, the average age of men marrying tended to be 2 to 3 years older than the average age of women marrying. Generally, the age difference at which men and women marry has been greater for all marriages than for first marriages.

TABLE 6

AGE OF FIRST AND ALL MARRIAGES

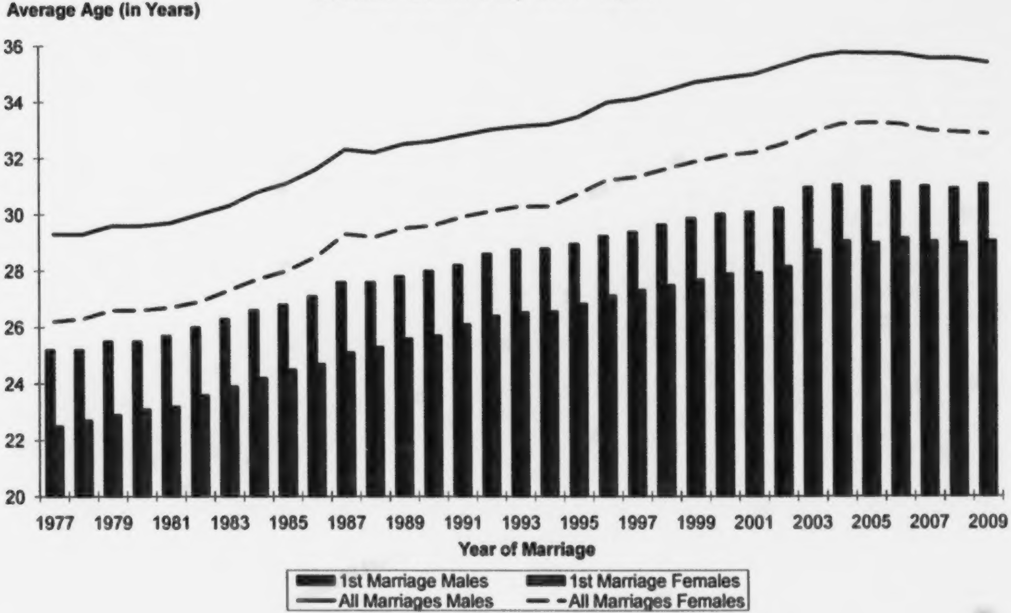
British Columbia, 1977–2009

Year of Marriage	Average Age (in Years)			
	First Marriage		All Marriages	
	Males	Females	Males	Females
1977	25.2	22.5	29.3	26.2
1978	25.2	22.7	29.3	26.3
1979	25.5	22.9	29.6	26.6
1980	25.5	23.1	29.6	26.6
1981	25.7	23.2	29.7	26.7
1982	26.0	23.6	30.0	26.9
1983	26.3	23.9	30.3	27.3
1984	26.6	24.2	30.8	27.7
1985	26.8	24.5	31.1	28.0
1986	27.1	24.7	31.6	28.5
1987	27.6	25.1	32.3	29.3
1988	27.6	25.3	32.2	29.2
1989	27.8	25.6	32.5	29.5
1990	28.0	25.7	32.6	29.6
1991	28.2	26.1	32.8	29.9
1992	28.6	26.4	33.0	30.1
1993	28.7	26.5	33.1	30.3
1994	28.8	26.6	33.2	30.3
1995	28.9	26.8	33.4	30.7
1996	29.2	27.1	34.0	31.2
1997	29.4	27.3	34.1	31.3
1998	29.6	27.5	34.4	31.6
1999	29.8	27.7	34.7	31.8
2000	30.0	27.9	34.8	32.1
2001	30.1	27.9	35.0	32.2
2002	30.2	28.1	35.3	32.5
2003	30.9	28.7	35.6	32.9
2004	31.0	29.0	35.7	33.2
2005	30.9	29.0	35.7	33.2
2006	31.1	29.1	35.7	33.2
2007	31.0	29.0	35.5	33.0
2008	30.9	29.0	35.5	32.9
2009	31.0	29.0	35.4	32.8

FIGURE 28

AGE OF FIRST AND ALL MARRIAGES

British Columbia, 1977–2009



Birth-related Statistics

Birth Introduction

Statistics based on birth events form a crucial part of the demographic profile of communities, regions, provinces, and countries. They are used to derive important indicators of health status, fertility, infant mortality, and population growth. In turn, those indicators are used for health planning, policy formulation, research, and commerce. The tables in this part of the report present birth statistics categorized by maternal characteristics and other related measures. The tables refer only to live births except Table 7 which also includes stillbirths. The mother's usual residence is used to identify geographic location.

Births – General Indicators

Certain birth and parental characteristics that are presented in this section have been shown to be related to the infant's health status or are of general interest. These characteristics include age of mother, age of father, kind of birth (single, twin, or multiple), LHA of usual residence, and mode of delivery.

Table 7 shows the live birth cardinality by mother's age. About 82.2 percent of live births in 2009 were first or second births. Second, third, and subsequent live births tend to have been delivered to progressively older women.

Table 8 shows the number of live births in BC in 2009 by the age of mother and the age of father. It also shows, for each maternal age range, the number of infants born to couples who were not formally married to each other (Out-of-Wedlock).

Over half of the births (50.6 percent) in 2009 were to mothers 30 to 39 years old and 42.0 percent were to mothers in their 20s. Only 3.2 percent were to mothers less than 20 years and 4.1 percent to those 40 or older. For fathers, over half (52.7 percent) were in their 30s, more than a quarter (27.4 percent) were in their 20s, 14.0 percent were in their 40s or older, and 1.0 percent were less than 20 years old. In 4.9 percent of births, the father's age was not indicated.

Less than one percent (0.8 percent) of births (361) were to couples who were both in their teens; births to couples in which at least one person was a teen, made up 3.3 percent (1,501) of births.

While there were only 129 births (0.3 percent) to mothers age 45 years old and over, 4.3 percent (1,927) of all newborns had fathers in that age group.

Table 9 shows the number of births by birth kind (single, twin, triplet+) according to the mother's age group. In 2009, 4.4 percent of live births to mothers 35 years and older were multiple births, whereas 2.9 percent of live births to mothers aged 20 to 34 were multiples and teenagers had the lowest proportion (1.4 percent).

In recent decades there has been a gradual increase in multiple birth rates in BC (see Figure 8). The proportions of multiple live births increased from 1.9 percent of all live births in 1986 to 3.2 percent in 2009.

Table 10 shows the 2009 fertility rates in the LHA where the mother resided and by maternal age groups. The table also shows the number of live births to women 15-19 years of age over the five-year period 2004-2008 and the fertility rate for that age group.

In Figure 29, the Age Specific Fertility Rate (ASFR) statistics for 15-19 year olds for the five-year period 2004-2008 are shown by LHA. The ASFR is described more fully in the Glossary and an example of the calculation method is shown in the Methodology section.

Table 11 shows the number and percentage of births in each maternal age group according to their mode of delivery. Generally, the proportion of births that were spontaneous vertex deliveries (which generally require no medical intervention), and to a lesser extent births assisted by vacuum extraction, are higher for younger mothers. On the other hand, deliveries by cesarean section are proportionally higher for older mothers (see also Figure 13).

Cesarean section deliveries in BC increased from 209.59 per 1,000 live births in 1986 to 308.92 per 1,000 live births in 2009 (see Figure 11).

Table 12 shows live births by the LHA where the mother usually resided and focuses on spontaneous vertex and cesarean section modes of delivery. Spontaneous breech, forceps, and vacuum deliveries are combined into the 'Other' category. The table shows the number and percent of live births that were delivered by cesarean section.

The columns on the right side of the table indicate the total number of live births in 2009 to residents of each LHA and the birth rate per 1,000 population. The LHA with the highest live birth rate was more than five times the rate of the lowest. For more comparisons of cesarean section delivery rates, see also Figures 11, 12, and 13.

In Figure 30, the LHAs are grouped by their ratio of observed number of cesarean live births over expected number of cesarean live births for 2009. The figure shows the LHAs in quintiles from those with the highest cesarean ratios (quintile 5) to those with the lowest such rates (quintile 1).

Vital Statistics Information Box

BIRTHS BY MOTHER'S COUNTRY OF BIRTH

BRITISH COLUMBIA, 2009

Area	Province/Country	Births
Canada	**Total**	**29,809**
	British Columbia	21,645
	Ontario	2,608
	Alberta	2,573
	Manitoba	807
	Saskatchewan	774
	Quebec	590
	Nova Scotia	296
	Newfoundland & Labrador	184
	New Brunswick	132
	Yukon	86
	Northwest Territories	73
	Prince Edward Island	40
	Nunavut	1
North and Central America	**Total**	**1,335**
	United States	752
	Mexico	289
	Other North and Central American Countries	294
South America		**324**
Europe	**Total**	**2,171**
	England	396
	Other United Kingdom	252
	Germany	199
	Russia	159
	Romania	130
	Poland	125
	Ukraine	92
	Scandinavian Countries	72
	Netherlands	68
	Switzerland	50
	Other European Countries	628
Asia and the Middle East	**Total**	**9,889**
	India	2,840
	China	2,176
	Philippines	1,442
	Vietnam	537
	Japan	365
	Iran	308
	Taiwan	306
	Hong Kong	281
	Korea	460
	Pakistan	223
	Afghanistan	136
	Other Asian and Middle Eastern Countries	815
Africa	**Total**	**654**
	South Africa	184
	Other African Countries	470
Oceania	**Total**	**414**
	Fiji	221
	Australia	128
	New Zealand	56
	Other Oceanic Countries	9
Unknown	**Total**	**312**
Total		**44,908**

Note: Births consist of live births only. Non-residents are excluded.

TABLE 7

BIRTHS BY AGE OF MOTHER AND LIVE BIRTHS BY BIRTH ORDER

BRITISH COLUMBIA, 2009

Age of Mother	Birth Order										Total Live Births	Stillbirths	Total Births
	1	2	3	4	5	6	7	8	9+	N.S.			
<14	1	-	-	-	-	-	-	-	-	-	1	-	1
14	13	-	-	-	-	-	-	-	-	-	13	2	15
15	54	-	-	-	-	-	-	-	-	-	54	-	54
16	113	5	-	-	-	-	-	-	-	-	118	7	125
17	258	24	1	-	-	-	-	-	-	-	283	6	289
18	339	40	3	1	-	-	-	-	-	-	383	7	390
19	457	104	12	3	-	-	-	-	-	-	576	10	586
20	621	169	13	1	-	-	-	-	-	-	804	6	810
21	689	225	45	9	1	-	-	-	-	-	969	9	978
22	757	388	87	6	1	1	-	-	-	-	1,240	17	1,257
23	821	422	105	28	4	2	-	-	-	-	1,382	9	1,391
24	1,038	546	161	39	10	2	-	-	-	-	1,796	14	1,810
25	1,042	686	185	60	16	5	1	-	-	-	1,995	18	2,013
26	1,176	738	235	59	28	7	2	-	-	-	2,245	16	2,261
27	1,340	813	286	89	17	7	1	-	-	-	2,553	22	2,575
28	1,455	963	329	94	28	8	4	-	-	-	2,881	22	2,903
29	1,470	1,082	322	95	27	8	6	-	-	-	3,010	26	3,036
30	1,453	1,116	392	85	36	5	3	1	-	-	3,091	29	3,120
31	1,372	1,100	373	101	35	18	3	3	-	-	3,005	22	3,027
32	1,194	1,158	424	132	41	17	2	3	-	-	2,971	31	3,002
33	1,039	1,098	436	112	33	15	9	3	1	-	2,746	27	2,773
34	916	1,110	398	133	28	13	6	2	4	-	2,610	24	2,634
35	820	943	383	120	36	14	7	4	3	-	2,330	14	2,344
36	600	899	333	95	30	13	5	2	5	-	1,982	17	1,999
37	507	631	293	83	30	14	8	6	5	-	1,577	19	1,596
38	422	631	241	67	26	5	2	-	3	-	1,397	13	1,410
39	295	459	175	64	24	9	3	3	1	-	1,033	13	1,046
40	207	325	133	33	9	7	7	1	2	-	724	10	734
41	154	169	82	42	6	9	1	-	1	-	464	10	474
42	77	97	47	19	9	7	3	-	4	-	263	3	266
43	51	59	39	15	4	1	2	1	1	-	173	2	175
44	33	44	16	11	3	2	-	-	1	-	110	1	111
45	18	19	19	1	1	1	-	-	-	-	59	1	60
45+	26	21	10	4	1	4	1	2	1	-	70	2	72
TOTAL	**20,828**	**16,084**	**5,578**	**1,601**	**484**	**194**	**76**	**31**	**32**	**-**	**44,908**	**429**	**45,337**
PERCENT	**46.4**	**35.8**	**12.4**	**3.6**	**1.1**	**0.4**	**0.2**	**0.1**	**0.1**	**-**	**100.0**		

Note: Birth order denotes the number of live births. Total includes unknown gender. Non-residents are excluded. N.S. – Not stated.

TABLE 8

TOTAL LIVE BIRTHS BY AGE OF FATHER, AGE OF MOTHER AND OUT-OF-WEDLOCK

BRITISH COLUMBIA, 2009

Age of Father	Age of Mother (in Years)									Total	Percent
	<15	15–19	20–24	25–29	30–34	35–39	40–44	45+	N.S.		
< 15	2	-	1	-	-	-	-	-	-	3	-
15-19	9	350	62	6	3	1	-	-	-	431	1.0
20-24	-	556	1,926	522	80	18	3	1	-	3,106	6.9
25-29	-	151	2,438	5,157	1,252	194	23	2	-	9,217	20.5
30-34	-	38	799	4,440	6,792	1,243	102	3	-	13,417	29.9
35-39	-	15	238	1,474	4,265	3,891	350	11	-	10,244	22.8
40-44	-	4	79	371	1,204	1,946	741	28	-	4,373	9.7
45+	-	1	47	177	443	744	445	70	-	1,927	4.3
N.S.	3	299	601	537	384	282	70	14	-	2,190	4.9
TOTAL	**14**	**1,414**	**6,191**	**12,684**	**14,423**	**8,319**	**1,734**	**129**	-	**44,908**	
Percent	**0.0**	**3.1**	**13.8**	**28.2**	**32.1**	**18.5**	**3.9**	**0.3**			**100.0**
Out-of-Wedlock	**14**	**1,229**	**3,478**	**3,482**	**2,509**	**1,443**	**352**	**36**	-	**12,543**	

Note: Total percentage may not add up to 100 due to rounding.
Out-of-Wedlock - Indicates mother and father of child were not legally married to each other and excludes 1,627 cases where marital status was not stated.
Non-residents are excluded. N.S. – Not stated.

TABLE 9

LIVE BIRTHS BY AGE OF MOTHER AND KIND OF BIRTH

BRITISH COLUMBIA, 2009

Age of Mother	Kind of Birth				Total
	Single	Twin	Triplets+	N.S.	
< 15	14	-	-	-	14
15-19	1,394	20	-	-	1,414
20-24	6,077	114	-	-	6,191
25-29	12,352	323	9	-	12,684
30-34	13,914	503	6	-	14,423
35-39	8,008	305	6	-	8,319
40-44	1,624	110	-	-	1,734
45 +	98	31	-	-	129
N.S.	-	-	-	-	-
TOTAL	**43,481**	**1,406**	**21**	**-**	**44,908**

Note: For the multiple births that include stillbirths, only live births are shown. Triplets+ : included in this column are the live births from multiple births of three or more. Non-residents areexcluded. N.S.- Not stated.

Table 10

LIVE BIRTH FERTILITY RATES BY LOCAL HEALTH AREA, British Columbia, 2004–2008 and 2009

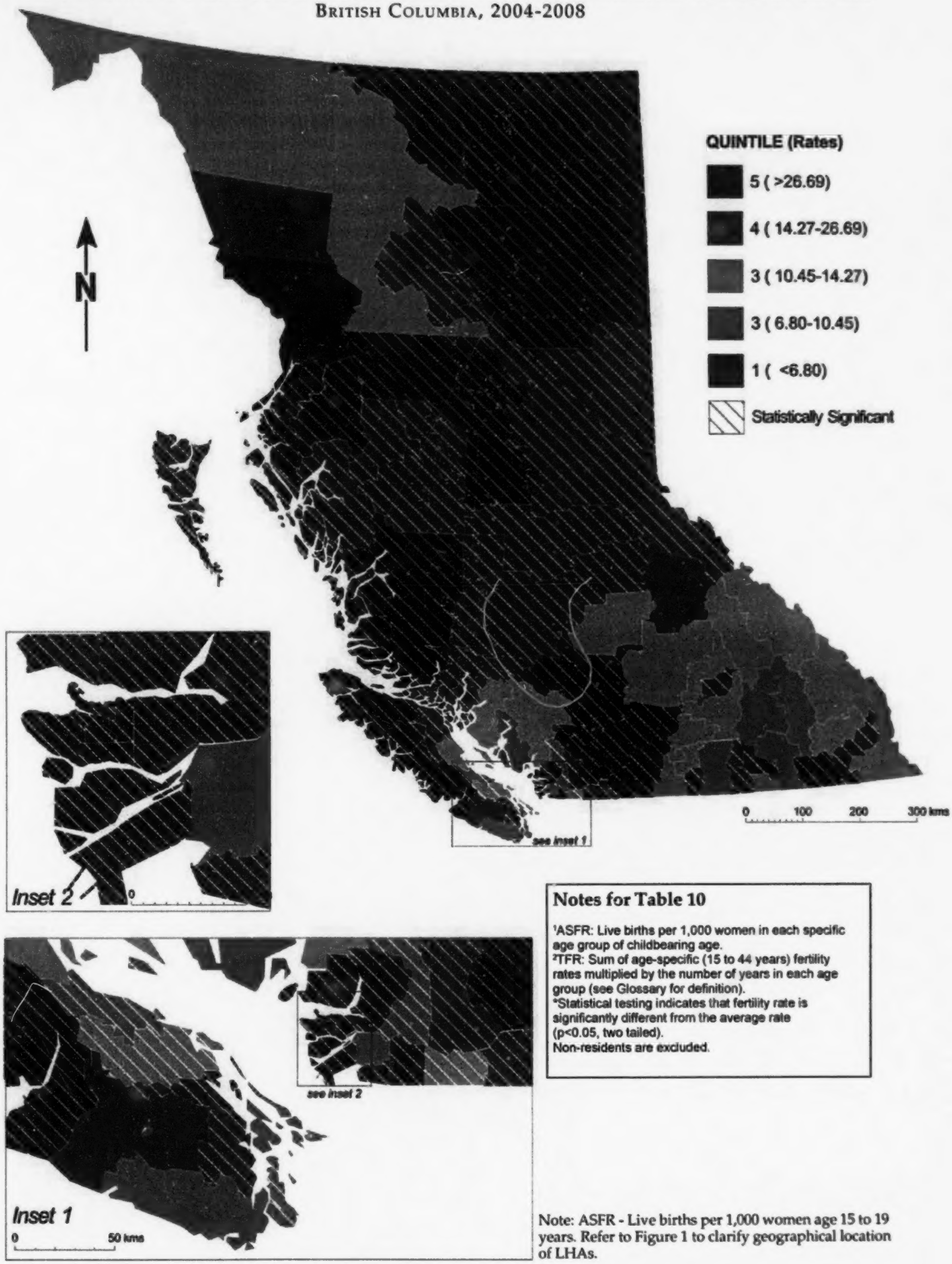
Local Health Area		2004–2008 Teenage Fertility Rate (15–19 yrs)			2009 ASFR[1]						TFR[2]	
		Observed	ASFR[1]	(p)	15–19	20–24	25–29	30–34	35–39	40–44	Rate	(p)
001	Fernie	28	11.71		10.78	48.14	175.44	92.78	41.93	7.92	1,884.94	*
002	Cranbrook	83	19.50	*	32.18	65.90	141.62	67.34	27.33	6.47	1,704.16	*
003	Kimberley	13	10.97		15.33	61.67	139.04	85.37	66.93	3.36	1,858.44	
004	Windermere	17	11.63		11.40	63.44	102.94	90.09	29.15	2.81	1,499.17	
005	Creston	57	29.81	*	32.26	108.50	125.48	108.00	63.77	9.43	2,237.20	*
006	Kootenay Lake	4	7.49		-	21.74	142.86	54.55	38.76	-	1,289.51	
007	Nelson	33	8.28		7.37	40.95	100.00	113.23	53.42	9.41	1,621.91	
009	Castlegar	5	2.51	*	2.29	35.35	84.85	91.43	17.82	2.00	1,168.69	*
010	Arrow Lakes	4	7.37		20.98	48.19	103.90	50.51	14.81	14.71	1,265.47	
011	Trail	38	11.54		9.17	45.45	129.63	98.65	42.83	6.19	1,659.68	
012	Grand Forks	22	18.84	*	18.59	36.87	83.80	72.63	36.53	11.15	1,297.80	
013	Kettle Valley	4	10.03		-	35.09	79.37	49.38	10.64	-	872.37	*
014	Southern Okanagan	39	16.67	*	13.62	43.08	182.48	82.09	26.09	1.83	1,745.94	
015	Penticton	74	12.41		10.26	50.57	115.87	90.47	37.37	7.96	1,562.49	
016	Keremeos	9	13.91		13.61	78.95	206.35	131.31	26.32	12.42	2,344.77	*
017	Princeton	18	27.69	*	7.52	32.61	100.00	95.24	26.09	6.62	1,340.38	
018	Golden	12	11.19		-	47.17	50.85	64.00	47.81	8.20	1,090.11	*
019	Revelstoke	19	13.73		12.55	53.64	139.01	110.66	50.19	-	1,830.27	
020	Salmon Arm	65	12.13		13.19	53.67	134.75	98.59	30.57	6.33	1,685.54	
021	Armstrong - Spallumcheen	16	9.83		8.62	75.19	122.64	87.16	30.65	-	1,621.29	
022	Vernon	126	12.26		17.27	69.96	157.67	112.46	36.53	4.44	1,991.67	*
023	Central Okanagan	275	10.31		10.75	48.77	94.85	101.01	42.79	6.49	1,523.33	
024	Kamloops	210	11.60		12.25	55.60	104.01	104.76	43.13	6.37	1,630.53	*
025	100 Mile House	30	12.59		14.61	57.64	114.70	105.26	39.27	6.59	1,690.38	
026	North Thompson	15	19.89		12.35	86.96	169.81	100.00	22.22	7.04	1,991.89	
027	Cariboo - Chilcotin	119	24.81	*	34.67	82.07	103.36	85.68	31.13	4.19	1,705.50	*
028	Quesnel	112	26.67	*	20.98	78.46	160.39	88.01	28.82	5.92	1,912.89	*
029	Lillooet	22	30.05	*	27.78	88.89	102.80	49.59	27.59	-	1,483.22	
030	South Cariboo	36	30.64	*	18.80	91.37	120.48	102.41	12.50	-	1,727.80	
031	Merritt	53	26.71	*	37.47	100.84	116.28	95.85	33.90	2.48	1,934.05	*
032	Hope	40	31.23	*	41.49	64.78	120.00	110.47	14.71	-	1,757.21	
033	Chilliwack	275	20.24	*	22.65	90.80	150.79	99.81	42.89	8.97	2,079.52	*
034	Abbotsford	278	12.17	*	10.70	67.83	128.71	99.08	41.66	6.15	1,770.64	*
035	Langley	145	6.48	*	8.04	43.56	114.64	119.28	52.71	9.12	1,736.77	*
037	Delta	58	3.18	*	3.39	24.53	81.35	121.10	60.76	12.08	1,516.04	
038	Richmond	66	2.17	*	1.23	12.58	59.94	115.25	61.26	13.99	1,321.26	*
040	New Westminster	67	9.04		4.10	29.77	63.95	102.03	65.49	11.93	1,386.34	*
041	Burnaby	134	4.34	*	3.95	19.09	53.44	110.87	67.81	13.76	1,344.68	*
042	Maple Ridge	110	7.13	*	6.55	50.76	116.03	107.42	50.00	9.59	1,701.68	*
043	Coquitlam	138	3.75	*	4.64	21.52	67.91	130.28	76.45	10.77	1,557.86	*
044	North Vancouver	49	2.20	*	1.14	11.53	53.33	110.05	83.68	13.07	1,364.00	*
045	West Vancouver-Bowen Is.	28	3.00	*	1.53	5.90	41.71	110.68	66.72	18.95	1,227.44	*
046	Sunshine Coast	42	9.42		10.16	66.25	173.23	92.53	44.81	7.90	1,974.35	*
047	Powell River	40	13.43		8.21	69.03	132.95	105.26	19.84	6.06	1,706.75	
048	Howe Sound	57	12.12		12.49	49.09	58.79	109.23	74.66	16.55	1,604.02	
049	Bella Coola Valley	42	74.34	*	25.00	97.09	70.59	123.29	46.51	-	1,812.37	
050	Queen Charlotte	18	25.07	*	7.14	76.92	72.58	76.92	34.72	13.25	1,407.68	
051	Snow Country	2	32.79		50.00	-	-	153.85	-	-	1,019.23	
052	Prince Rupert	113	37.04	*	38.82	97.61	135.21	96.77	35.93	5.60	2,049.67	*
053	Upper Skeena	39	34.61	*	46.51	91.50	181.82	105.96	46.98	5.00	2,388.87	*
054	Smithers	74	23.12	*	20.00	92.37	151.81	123.64	58.16	13.16	2,295.70	*
055	Burns Lake	34	23.43	*	21.34	95.04	134.53	145.08	49.55	-	2,227.70	*
056	Nechako	106	38.34	*	31.19	183.57	173.59	105.71	30.63	5.66	2,651.82	*
057	Prince George	340	19.52	*	25.28	71.51	109.40	100.75	35.21	5.48	1,738.15	*
059	Peace River South	117	23.60	*	28.94	102.45	136.36	85.38	44.55	5.14	2,014.15	*
060	Peace River North	206	33.86	*	19.53	140.12	156.89	97.03	36.95	13.03	2,317.73	*
061	Greater Victoria	233	7.79	*	6.76	20.82	43.67	90.57	58.01	13.03	1,164.23	*
062	Sooke	96	9.18		8.80	55.31	126.31	97.60	46.88	9.60	1,722.52	*
063	Saanich	74	7.28	*	10.04	23.76	91.23	138.97	39.60	6.55	1,550.66	
064	Gulf Islands	14	7.66		4.93	20.13	119.34	74.58	50.42	12.25	1,408.27	
065	Cowichan	187	18.29	*	19.51	53.46	135.62	99.65	47.71	8.19	1,820.72	*
066	Lake Cowichan	16	16.43		13.33	47.90	94.89	44.87	47.34	14.71	1,315.21	
067	Ladysmith	52	19.20	*	18.48	65.22	132.18	96.26	32.89	5.03	1,750.31	
068	Nanaimo	222	13.67	*	11.00	51.70	97.92	97.21	36.73	7.78	1,511.69	
069	Qualicum	41	7.43	*	6.69	54.40	122.48	92.99	34.62	1.63	1,564.01	
070	Alberni	163	31.74	*	25.20	110.86	134.23	82.66	37.40	6.34	1,983.51	*
071	Courtenay	122	12.14		10.44	55.86	104.47	96.89	35.79	9.00	1,562.21	
072	Campbell River	133	19.52	*	15.41	65.35	173.81	90.50	45.02	4.18	1,971.40	*
075	Mission	114	15.29	*	10.93	63.75	128.87	91.56	37.11	7.91	1,700.69	*
076	Agassiz - Harrison	47	35.96	*	32.79	94.42	145.83	91.30	36.00	3.80	2,020.74	*
077	Summerland	22	11.17		4.83	50.19	132.95	116.28	47.27	2.82	1,771.70	
078	Enderby	26	20.27	*	22.47	76.27	117.65	108.28	67.42	-	1,960.43	*
080	Kitimat	34	16.76	*	34.12	86.38	142.86	98.31	45.60	2.45	2,048.58	*
081	Fort Nelson	48	45.85	*	45.71	144.93	86.09	68.03	38.31	-	1,915.38	*
083	Central Coast	17	52.63	*	41.67	216.67	83.33	19.23	54.05	-	2,074.76	
084	Vancouver Island West	19	49.35	*	78.95	98.36	100.00	65.22	67.80	-	2,051.61	
085	Vancouver Island North	90	39.95	*	56.69	105.85	154.61	87.35	44.94	7.06	2,282.48	*
087	Stikine	2	13.61		43.48	64.52	88.24	58.82	68.97	-	1,620.09	
088	Terrace	126	32.13	*	30.83	99.25	174.00	93.75	40.79	5.33	2,219.75	*
092	Nisga'a	34	82.32	*	89.89	200.00	196.43	67.80	42.25	34.48	3,154.25	*
094	Telegraph Creek	3	17.86		76.92	66.67	90.91	43.48	153.85	-	2,159.12	
161	Vancouver - City Centre	23	3.98	*	1.80	7.31	18.65	53.33	53.00	14.25	741.71	*
162	Vancouver - Downtown E.side	72	14.63	*	13.77	25.52	37.13	61.05	51.13	11.35	999.76	*
163	Vancouver - North East	81	5.62	*	5.32	22.03	55.10	101.51	68.73	13.42	1,330.59	*
164	Vancouver - Westside	23	1.20	*	0.76	5.16	22.52	83.73	68.38	19.65	1,001.06	*
165	Vancouver - Midtown	56	5.93	*	5.89	19.66	42.20	85.65	80.91	19.59	1,269.55	*
166	Vancouver - South	98	4.64	*	5.60	23.87	59.47	91.62	64.89	14.88	1,301.63	*
201	Surrey	584	9.67		8.85	57.42	116.07	114.20	52.34	10.47	1,796.75	*
202	South Surrey/White Rock	28	2.30	*	1.99	20.17	68.88	113.00	58.70	8.53	1,356.40	*
	PROVINCIAL TOTAL	**7,084**	**10.46**		**10.24**	**41.27**	**81.87**	**99.60**	**54.40**	**10.51**	**1,489.46**	

Notes for this table follow the map.

FIGURE 29

LIVE BIRTH TEENAGE FERTILITY RATES BY LOCAL HEALTH AREA

British Columbia, 2004-2008


N
QUINTILE (Rates)
5 (>26.69)
4 (14.27-26.69)
3 (10.45-14.27)
3 (6.80-10.45)
1 (<6.80)
Statistically Significant
0
100
200
300 kms
see inset 1
Inset 2
0
see inset 2
Inset 1
0
50 kms

Notes for Table 10

[1]ASFR: Live births per 1,000 women in each specific age group of childbearing age.
[2]TFR: Sum of age-specific (15 to 44 years) fertility rates multiplied by the number of years in each age group (see Glossary for definition).
*Statistical testing indicates that fertility rate is significantly different from the average rate (p<0.05, two tailed).
Non-residents are excluded.

Note: ASFR - Live births per 1,000 women age 15 to 19 years. Refer to Figure 1 to clarify geographical location of LHAs.

TABLE 11

LIVE BIRTHS BY MODE OF DELIVERY AND AGE OF MOTHER

BRITISH COLUMBIA, 2009

Mode of Delivery	Age of Mother (in Years)									Total
	<15	15–19	20–24	25–29	30–34	35–39	40–44	45+	N.S.	
Spontaneous vertex	10	1,033	4,080	7,844	8,301	4,355	772	39	-	26,434
Percent	71.4	73.1	65.9	61.8	57.6	52.4	44.5	30.2		58.9
Spontaneous breech	-	4	14	54	36	31	11	1	-	151
Percent	0.0	0.3	0.2	0.4	0.2	0.4	0.6	0.8		0.3
Forceps	-	33	193	398	482	274	47	4	-	1,431
Percent	0.0	2.3	3.1	3.1	3.3	3.3	2.7	3.1		3.2
Vacuum	2	107	482	873	966	482	101	6	-	3,019
Percent	14.3	7.6	7.8	6.9	6.7	5.8	5.8	4.7		6.7
First cesarean	-	218	1,059	2,295	2,734	1,598	451	52	-	8,409
Percent	0.0	15.4	17.1	18.1	19.0	19.2	26.0	40.3		18.7
Repeat cesarean	-	19	363	1,220	1,904	1,579	352	27	-	5,464
Percent	0.0	1.3	5.9	9.6	13.2	19.0	20.3	20.9		12.2
N.S.	-	-	-	-	-	-	-	-	-	-
TOTAL	**14**	**1,414**	**6,191**	**12,684**	**14,423**	**8,319**	**1,734**	**129**	**-**	**44,908**
Percent	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		**100.0**

Note: Breech presentations may be coded to forceps, vacuum, first cesarean or repeat cesarean mode of delivery, as well as spontaneous breech. Total percentage may not add up to 100 due to rounding. Non-residents are excluded. N.S. - Not stated.

Vital Statistics Information Box

PLACE OF BIRTH FOR MIDWIFE ASSISTED BIRTHS

BRITISH COLUMBIA, 2005-2009

The College of Midwives of British Columbia was established in 1995, and the first midwives were registered to practice in 1998. The Vital Statistics Agency implemented procedures to identify births delivered by registered midwives in 1998, and, by 1999, could identify all midwife assisted births. The table below shows the place of birth for midwife assisted births in the province from 2005 to 2009.

	2005		2006		2007		2008		2009	
Place of Birth	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Hospital	1,505	70.8	1,760	74.1	2,054	75.6	2,509	76.2	2,949	75.9
Home	475	22.3	223	9.4	647	23.8	721	21.9	851	21.9
Other & unknown*	146	6.9	393	16.5	15	0.6	62	1.9	83	2.1
Midwife Assisted Births	**2,126**	**100.0**	**2,376**	**100.0**	**2,716**	**100.0**	**3,292**	**100.0**	**3,883**	**100.0**
Percent of Total Births Delivered by Registered Midwives		**5.2**		**5.7**		**6.2**		**7.5**		**8.6**

Note: *Other and unknown includes birthing clinics.

Table 12

LIVE BIRTHS BY LOCAL HEALTH AREA AND MODE OF DELIVERY, BRITISH COLUMBIA, 2009

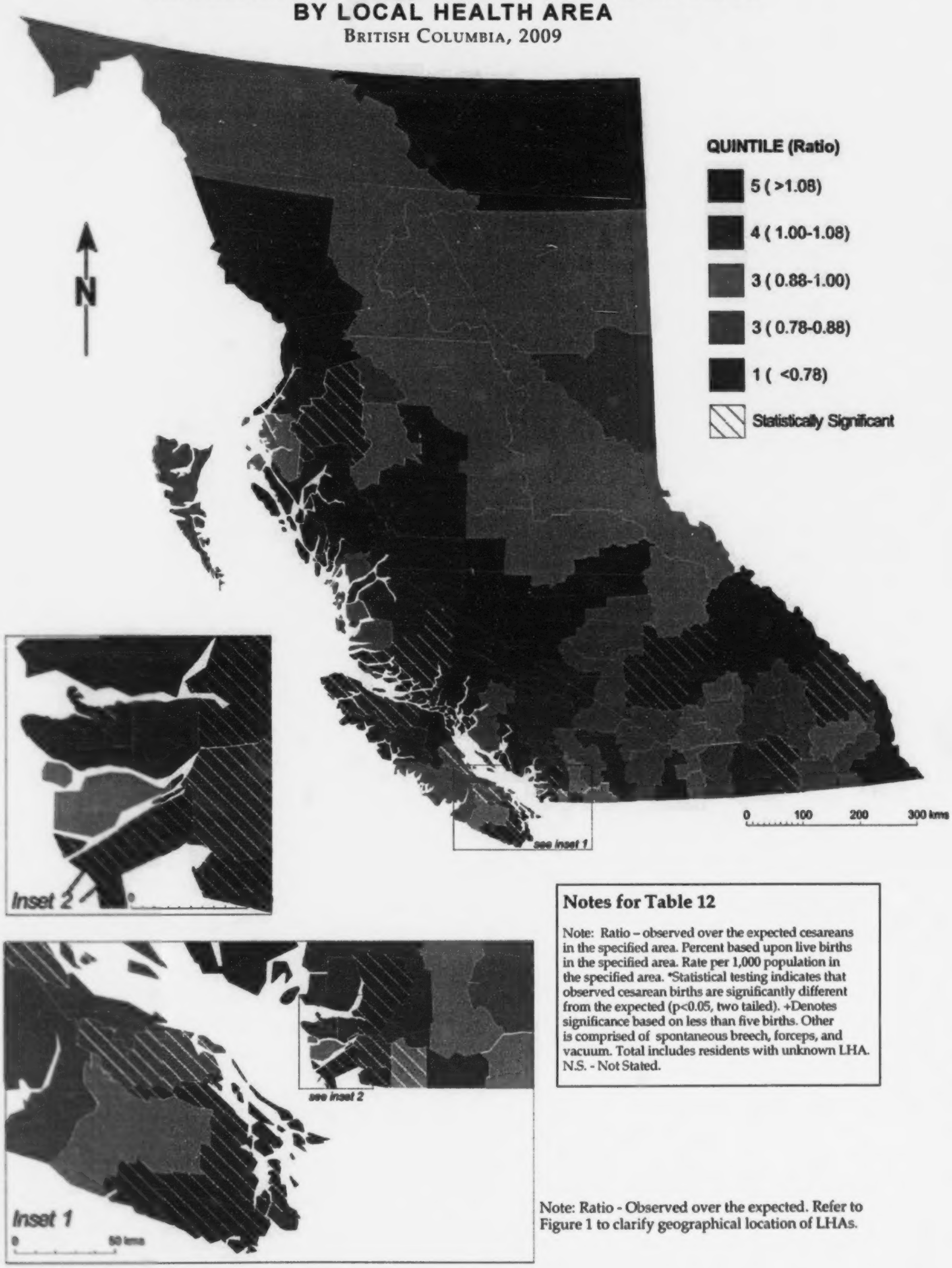
		Spontaneous	Cesarean									Total Live Births	
Local Health Area		Vertex	First	Repeat	Total	Expected	Ratio	(p)	Percent	Other	N.S.	Number	Rate
001	Fernie	82	33	30	63	51.28	1.23		38.0	21	-	166	11.15
002	Cranbrook	182	40	29	69	79.39	0.87		26.8	6	-	257	9.98
003	Kimberley	52	12	13	25	25.64	0.98		30.1	6	-	83	9.67
004	Windermere	75	12	8	20	31.20	0.64	•	19.8	6	-	101	9.42
005	Creston	95	23	11	34	41.70	0.82		25.2	6	-	135	10.66
006	Kootenay Lake	14	5	1	6	6.80	0.88		27.3	2	-	22	5.72
007	Nelson	170	37	21	58	75.99	0.76	•	23.6	18	-	246	9.79
009	Castlegar	51	12	14	26	25.95	1.00		31.0	7	-	84	6.25
010	Arrow Lakes	16	4	2	6	7.41	0.81		25.0	2	-	24	5.02
011	Trail	94	19	33	52	50.05	1.04		32.1	16	-	162	8.36
012	Grand Forks	36	7	3	10	16.06	0.62		19.2	6	-	52	5.75
013	Kettle Valley	8	-	3	3	3.71	0.81		25.0	1	-	12	3.25
014	Southern Okanagan	78	21	12	33	36.14	0.91		28.2	6	-	117	5.90
015	Penticton	203	69	33	102	103.18	0.99		30.5	29	-	334	8.02
016	Keremeos	23	6	7	13	12.05	1.08		33.3	3	-	39	7.44
017	Princeton	15	3	3	6	6.80	0.88		27.3	1	-	22	4.35
018	Golden	28	8	13	21	16.99	1.24		38.2	6	-	55	7.48
019	Revelstoke	49	17	13	30	27.19	1.10		34.1	9	-	88	11.10
020	Salmon Arm	156	50	45	95	81.56	1.16		36.0	13	-	264	7.58
021	Armstrong - Spallumcheen	54	11	8	19	23.48	0.81		25.0	3	-	76	7.85
022	Vernon	410	111	77	188	200.49	0.94		29.0	51	-	649	9.85
023	Central Okanagan	994	288	221	509	523.31	0.97		30.0	191	-	1,694	9.19
024	Kamloops	638	211	171	382	338.58	1.13	•	34.9	76	-	1,096	9.89
025	100 Mile House	70	19	10	29	33.98	0.85		26.4	11	-	110	7.45
026	North Thompson	27	8	5	13	13.59	0.96		29.5	4	-	44	10.21
027	Cariboo - Chilcotin	163	56	41	97	87.12	1.11		34.4	22	-	282	10.55
028	Quesnel	156	49	29	78	79.70	0.98		30.2	24	-	258	10.94
029	Lillooet	26	4	3	7	11.43	0.61		18.9	4	-	37	8.36
030	South Cariboo	40	7	8	15	19.15	0.78		24.2	7	-	62	8.36
031	Merritt	89	21	11	32	40.16	0.80		24.6	9	-	130	11.09
032	Hope	48	9	6	15	21.32	0.70		21.7	6	-	69	8.41
033	Chilliwack	679	179	129	308	334.56	0.92		28.4	96	-	1,083	12.80
034	Abbotsford	1,003	337	209	546	545.24	1.00		30.9	216	-	1,765	12.98
035	Langley	943	234	169	403	455.04	0.89	•	27.4	127	-	1,473	11.38
037	Delta	437	162	148	310	257.33	1.20	•	37.2	86	-	833	8.28
038	Richmond	1,064	325	225	550	552.66	1.00		30.7	175	-	1,789	9.26
040	New Westminster	386	153	75	228	226.13	1.01		31.1	118	-	732	11.26
041	Burnaby	1,343	475	270	745	731.21	1.02		31.5	279	-	2,367	10.62
042	Maple Ridge	565	200	129	329	309.23	1.06		32.9	107	-	1,001	10.73
043	Coquitlam	1,258	473	307	780	700.94	1.11	•	34.4	231	-	2,269	10.53
044	North Vancouver	697	235	153	388	376.57	1.03		31.8	134	-	1,219	8.83
045	West Vancouver-Bowen Is.	146	50	34	84	78.47	1.07		33.1	24	-	254	4.94
046	Sunshine Coast	121	50	22	72	65.80	1.09		33.8	20	-	213	7.21
047	Powell River	97	20	16	36	45.10	0.80		24.7	13	-	146	7.36
048	Howe Sound	282	91	60	151	145.50	1.04		32.1	38	-	471	13.54
049	Bella Coola Valley	25	2	2	4	9.58	0.42		12.9	2	-	31	10.72
050	Queen Charlotte	24	8	2	10	11.43	0.87		27.0	3	-	37	7.95
051	Snow Country	2	-	1	1	0.93	1.08		33.3	-	-	3	6.12
052	Prince Rupert	102	28	25	53	55.61	0.95		29.4	25	-	180	12.64
053	Upper Skeena	52	8	13	21	24.10	0.87		26.9	5	-	78	14.42
054	Smithers	136	37	24	61	67.04	0.91		28.1	20	-	217	13.59
055	Burns Lake	67	9	11	20	30.58	0.65		20.2	12	-	99	12.56
056	Nechako	152	42	27	69	71.36	0.97		29.9	10	-	231	15.39
057	Prince George	713	210	127	337	350.01	0.96		29.7	83	-	1,133	11.79
059	Peace River South	218	54	32	86	103.80	0.83		25.6	32	-	336	12.46
060	Peace River North	396	103	87	190	190.30	1.00		30.8	30	-	616	17.69
061	Greater Victoria	1,080	395	213	608	568.72	1.07		33.0	153	-	1,841	8.31
062	Sooke	437	170	109	279	234.47	1.19	•	36.8	43	-	759	11.38
063	Saanich	263	50	41	91	118.93	0.77	•	23.6	31	-	385	6.05
064	Gulf Islands	65	11	6	17	25.33	0.67		20.7	-	-	82	5.22
065	Cowichan	386	69	56	125	167.74	0.75	•	23.0	32	-	543	9.54
066	Lake Cowichan	28	6	6	12	12.97	0.92		28.6	2	-	42	6.54
067	Ladysmith	102	14	15	29	43.25	0.67	•	20.7	9	-	140	7.62
068	Nanaimo	598	144	93	237	285.13	0.83	•	25.7	88	-	923	8.97
069	Qualicum	158	30	29	59	73.21	0.81		24.9	20	-	237	5.23
070	Alberni	217	61	35	96	109.98	0.87		27.0	43	-	356	11.29
071	Courtenay	339	79	46	125	152.61	0.82	•	25.3	30	-	494	7.71
072	Campbell River	223	94	53	147	127.58	1.15		35.6	43	-	413	9.93
075	Mission	272	85	46	131	140.25	0.93		28.9	51	-	454	10.75
076	Agassiz - Harrison	61	13	12	25	30.27	0.83		25.5	12	-	98	10.90
077	Summerland	53	8	9	17	23.79	0.71		22.1	7	-	77	6.58
078	Enderby	49	14	7	21	23.17	0.91		28.0	5	-	75	9.82
080	Kitimat	64	33	13	46	36.14	1.27		39.3	7	-	117	11.36
081	Fort Nelson	50	27	12	39	29.04	1.34		41.5	5	-	94	15.37
083	Central Coast	14	4	2	6	7.11	0.84		26.1	3	-	23	15.68
084	Vancouver Island West	16	3	2	5	7.41	0.67		20.8	3	-	24	10.15
085	Vancouver Island North	113	20	12	32	49.12	0.65	•	20.1	14	-	159	12.94
087	Stikine	7	1	2	3	3.09	0.97		30.0	-	-	10	9.89
088	Terrace	198	26	19	45	80.01	0.56	•	17.4	16	-	259	12.77
092	Nisga'a	32	6	-	6	12.36	0.49		15.0	2	-	40	20.33
094	Telegraph Creek	7	-	2	2	2.78	0.72		22.2	-	-	9	13.01
161	Vancouver - City Centre	544	265	73	338	327.76	1.03		31.9	179	-	1,061	8.89
162	Vancouver - Downtown E.side	357	99	34	133	171.76	0.77	•	23.9	66	-	556	8.60
163	Vancouver - North East	615	232	124	356	340.43	1.05		32.3	131	-	1,102	10.53
164	Vancouver - Westside	633	222	126	348	346.30	1.00		31.0	140	-	1,121	8.42
165	Vancouver - Midtown	563	224	105	329	324.98	1.01		31.3	160	-	1,052	11.93
166	Vancouver - South	708	249	172	421	401.91	1.05		32.4	172	-	1,301	9.77
201	Surrey	2,831	982	729	1,711	1,601.75	1.07	•	33.0	643	-	5,185	13.58
202	South Surrey/White Rock	301	116	80	196	163.73	1.20	•	37.0	33	-	530	6.29
	PROVINCIAL TOTAL	**26,434**	**8,409**	**5,464**	**13,873**	**13,873.00**	**1.00**		**30.9**	**4,601**	**-**	**44,908**	**10.08**

Notes for this table follow the map.

FIGURE 30

CESAREAN DELIVERIES OF LIVE BORN INFANTS BY LOCAL HEALTH AREA

BRITISH COLUMBIA, 2009


N
QUINTILE (Ratio)
5 (>1.08)
4 (1.00-1.08)
3 (0.88-1.00)
3 (0.78-0.88)
1 (<0.78)
▨ Statistically Significant
0 100 200 300 kms
see inset 1
Inset 2
0
see inset 2
Inset 1
0 50 kms

Notes for Table 12

Note: Ratio – observed over the expected cesareans in the specified area. Percent based upon live births in the specified area. Rate per 1,000 population in the specified area. *Statistical testing indicates that observed cesarean births are significantly different from the expected (p<0.05, two tailed). +Denotes significance based on less than five births. Other is comprised of spontaneous breech, forceps, and vacuum. Total includes residents with unknown LHA. N.S. - Not Stated.

Note: Ratio - Observed over the expected. Refer to Figure 1 to clarify geographical location of LHAs.

Births – Birth Weight

Birth weight is recognized as a primary indicator of newborn health not only in BC and Canada but worldwide. It is also an important predictor of subsequent health and well being, as well as disability and death, among newborn infants. In BC, a baby is weighed (in grams) immediately after birth, and that weight is used as one of the diagnostic indicators of fetal growth.

The following tables show birth weight categorized by other indicators related to birth weight, such as gender, gestational age, and maternal age.

Babies born at term (37 to 41 weeks) and between 2,500 and 4,499 grams have been shown to have the most favourable prospects for good health. Table 13 indicates that 39,672 births or 88.3 percent of all live births in 2009 were in that category. There were 3,343 pre-term births (less than 37 weeks), which accounted for 7.4 percent of all live births.

Table 14 shows the number of live births to residents of BC in 2009 according to maternal age group and infant birth weight category. By far, most of the babies in each age group had healthy weights (from 2,500 to 4,499 grams).

Table 14 shows that mothers in the mid-age categories had the largest proportions of healthy weight babies and the lowest proportions of Low Birth Weight (LBW) babies (weighing less than 2,500 grams).

Table 15 displays the number and percent of LBW babies by gender according to the mother's age group. Female babies have a higher rate of LBW (58.36 per 1,000 female live births) than males (53.11 per 1,000 male live births).

Figure 31 graphically shows the pattern of LBW by maternal age groups. Women in the middle age groups had the lowest rates of LBW babies in 2009 with increasing rates in subsequent age groups. Older mothers not only have increased rates of LBW babies but the rate among older mothers has shown an increasing trend since 1986 as indicated in Figure 10.

Table 16 shows the incidence of LBW babies in the period 2004 to 2008 and the year 2009, stratified by the LHA of maternal residence for the whole province. As well as the incidence of such births, the 2004 to 2008 portion of the table shows the LBW rate per 1,000 live births and the ratio of the observed and expected number of LBW births in the LHA.

There were 16 LHAs with ratios that were statistically significant. Of these, 7 were high. The 2009 data show the incidence figures broken down by three categories: gestational age of the newborn, the total number of LBW births, and the rate. In some LHAs the number of LBW babies was quite low in 2009, so the rates should be viewed with caution.

Figure 32 shows BC LHAs displayed in five levels according to the 2004-2008 observed versus expected LBW ratio. High ratios, (Quintile 5, dark blue colour) mean that an LHA had quite a high ratio in the years 2004-2008. At the other extreme, the areas shown as dark grey had a relatively low ratio.

TABLE 13

LIVE BIRTHS BY BIRTH WEIGHT, GENDER, AND GESTATIONAL AGE

BRITISH COLUMBIA, 2009

Birth Weight (in Grams)	Gender		Gestational Age (in Weeks)						Total
	Male	Female	<20	20–27	28–36	37–41	42+	N.S.	
<500	15	17	3	29	-	-	-	-	32
500-749	29	34	-	57	6	-	-	-	63
750-999	35	35	-	52	18	-	-	-	70
1,000-1,249	58	42	-	27	73	-	-	-	100
1,250-1,499	68	65	-	4	125	4	-	-	133
1,500-1,749	124	98	-	-	218	4	-	-	222
1,750-1,999	143	160	-	-	280	23	-	-	303
2,000-2,249	268	278	-	1	412	133	-	-	546
2,250-2,499	491	539	-	-	513	517	-	-	1,030
2,500-2,749	934	1,132	-	-	537	1,528	1	-	2,066
2,750-2,999	1,978	2,508	-	-	474	4,008	4	-	4,486
3,000-3,249	3,410	3,950	-	-	280	7,059	21	-	7,360
3,250-3,499	4,464	4,620	-	1	145	8,899	39	-	9,084
3,500-3,749	4,409	3,811	-	-	52	8,116	52	-	8,220
3,750-3,999	3,200	2,393	-	-	22	5,514	57	-	5,593
4,000-4,249	1,969	1,268	-	-	11	3,184	42	-	3,237
4,250-4,499	915	473	-	-	1	1,364	23	-	1,388
4,500-4,749	408	186	-	-	1	580	13	-	594
4,750-4,999	164	64	-	-	1	220	6	1	228
5,000-5,249	52	20	-	-	-	68	4	-	72
5,250-5,499	15	8	-	-	-	23	-	-	23
5,500+	4	1	-	-	-	5	-	-	5
N.S.	26	27	-	-	-	-	-	53	53
TOTAL	**23,179**	**21,729**	**3**	**171**	**3,169**	**41,249**	**262**	**54**	**44,908**

Note: Non-residents are excluded. N.S. – Not stated.

TABLE 14

LIVE BIRTHS BY BIRTH WEIGHT AND AGE OF MOTHER

BRITISH COLUMBIA, 2009

Birth Weight (in Grams)	Age of Mother (in Years)									Total
	<15	15–19	20–24	25–29	30–34	35–39	40–44	45+	N.S.	
<500	-	-	4	10	12	4	2	-	-	32
500-749	-	3	12	14	24	5	4	1	-	63
750-999	-	3	10	21	18	12	5	1	-	70
1,000-1,249	-	4	8	24	29	26	6	3	-	100
1,250-1,499	-	1	12	34	43	30	11	2	-	133
1,500-1,749	-	6	32	53	62	52	15	2	-	222
1,750-1,999	-	9	33	79	103	54	24	1	-	303
2,000-2,249	-	12	65	130	174	133	30	2	-	546
2,250-2,499	1	30	123	272	327	207	61	9	-	1,030
2,500-2,749	-	78	299	545	660	382	90	12	-	2,066
2,750-2,999	1	128	597	1,297	1,492	772	184	15	-	4,486
3,000-3,249	3	227	1,036	2,074	2,347	1,363	292	18	-	7,360
3,250-3,499	3	272	1,321	2,563	2,870	1,722	306	27	-	9,084
3,500-3,749	2	280	1,079	2,344	2,657	1,546	300	12	-	8,220
3,750-3,999	4	177	739	1,688	1,750	1,025	198	12	-	5,593
4,000-4,249	-	104	484	852	1,085	591	118	3	-	3,237
4,250-4,499	-	54	197	400	455	228	46	8	-	1,388
4,500-4,749	-	18	93	168	195	95	24	1	-	594
4,750-4,999	-	7	24	67	74	48	8	-	-	228
5,000-5,249	-	1	12	22	24	11	2	-	-	72
5,250-5,499	-	-	3	9	7	4	-	-	-	23
5,500+	-	-	-	2	1	2	-	-	-	5
Low	1	68	299	637	792	523	158	21	-	2,499
Percent	7.1	4.8	4.8	5.0	5.5	6.3	9.1	16.3	-	5.6
Healthy	13	1,320	5,752	11,763	13,316	7,629	1,534	107	-	41,434
Percent	92.9	93.4	92.9	92.7	92.3	91.7	88.5	82.9	-	92.3
High	-	26	132	268	301	160	34	1	-	922
Percent	-	1.8	2.1	2.1	2.1	1.9	2.0	0.8	-	2.1
N.S.	-	-	8	16	14	7	8	-	-	53
TOTAL	**14**	**1,414**	**6,191**	**12,684**	**14,423**	**8,319**	**1,734**	**129**	**-**	**44,908**

Note: Low birth weight <2,500 grams. Healthy birth weight 2,500 to 4,499 grams. High birth weight 4,500+ grams. Percent of age category in birth weight group. Non-residents are excluded. N.S. - Not stated.

TABLE 15

LOW BIRTH WEIGHT LIVE BIRTHS BY AGE OF MOTHER AND GENDER

BRITISH COLUMBIA, 2009

Age of Mother	Male		Female		Total		
	Number	Percent	Number	Percent	Number	Percent	Rate
< 15	-	-	1	0.1	1	0.0	+
15-19	31	2.5	37	2.9	68	2.7	48.09
20-24	147	11.9	152	12.0	299	12.0	48.30
25-29	320	26.0	317	25.0	637	25.5	50.22
30-34	384	31.2	408	32.2	792	31.7	54.91
35-39	250	20.3	273	21.5	523	20.9	62.87
40-44	85	6.9	73	5.8	158	6.3	91.12
45 +	14	1.1	7	0.6	21	0.8	162.79
N.S.	-	-	-	-	-	-	-
TOTAL	**1,231**	**100.0**	**1,268**	**100.0**	**2,499**	**100.0**	**55.65**

Note: Rate per 1,000 live births for the specified age group.
Low birth weight: birth weight less than 2,500 grams.
Total percentage may not add up to 100 due to rounding. Total includes unknown gender.
+ Denotes the number of cases is less than five
Non-residents are excluded. N.S. – Not stated.

FIGURE 31

LOW BIRTH WEIGHT LIVE BIRTHS BY AGE OF MOTHER

BRITISH COLUMBIA, 2009

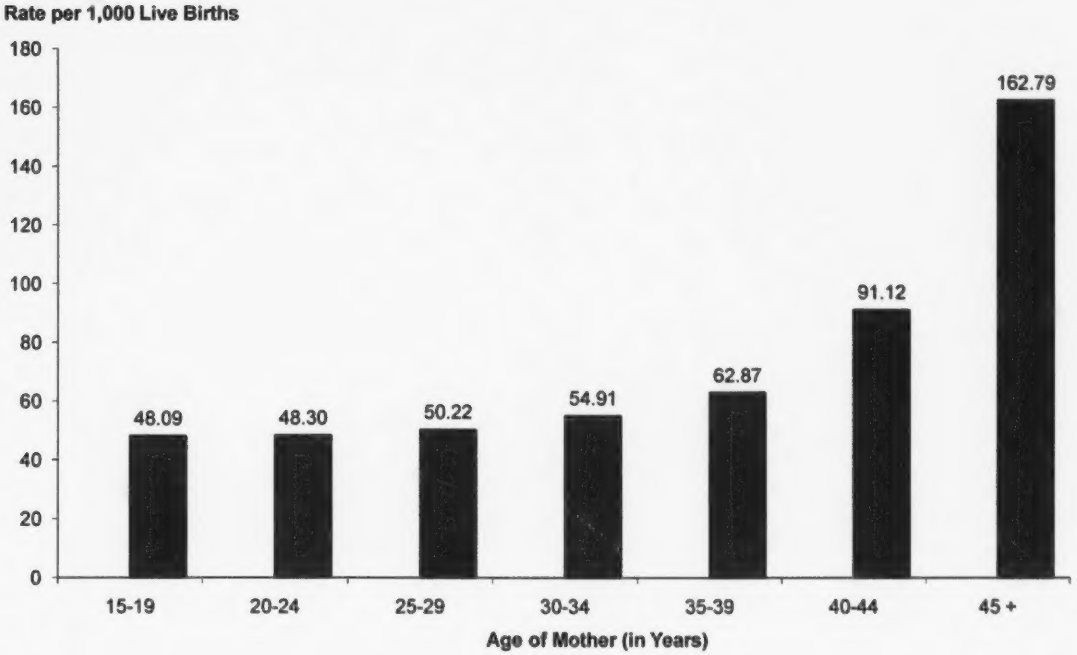


Table 16

LOW BIRTH WEIGHT LIVE BIRTHS BY LOCAL HEALTH AREA AND GESTATIONAL AGE,

British Columbia, 2004–2008 and 2009

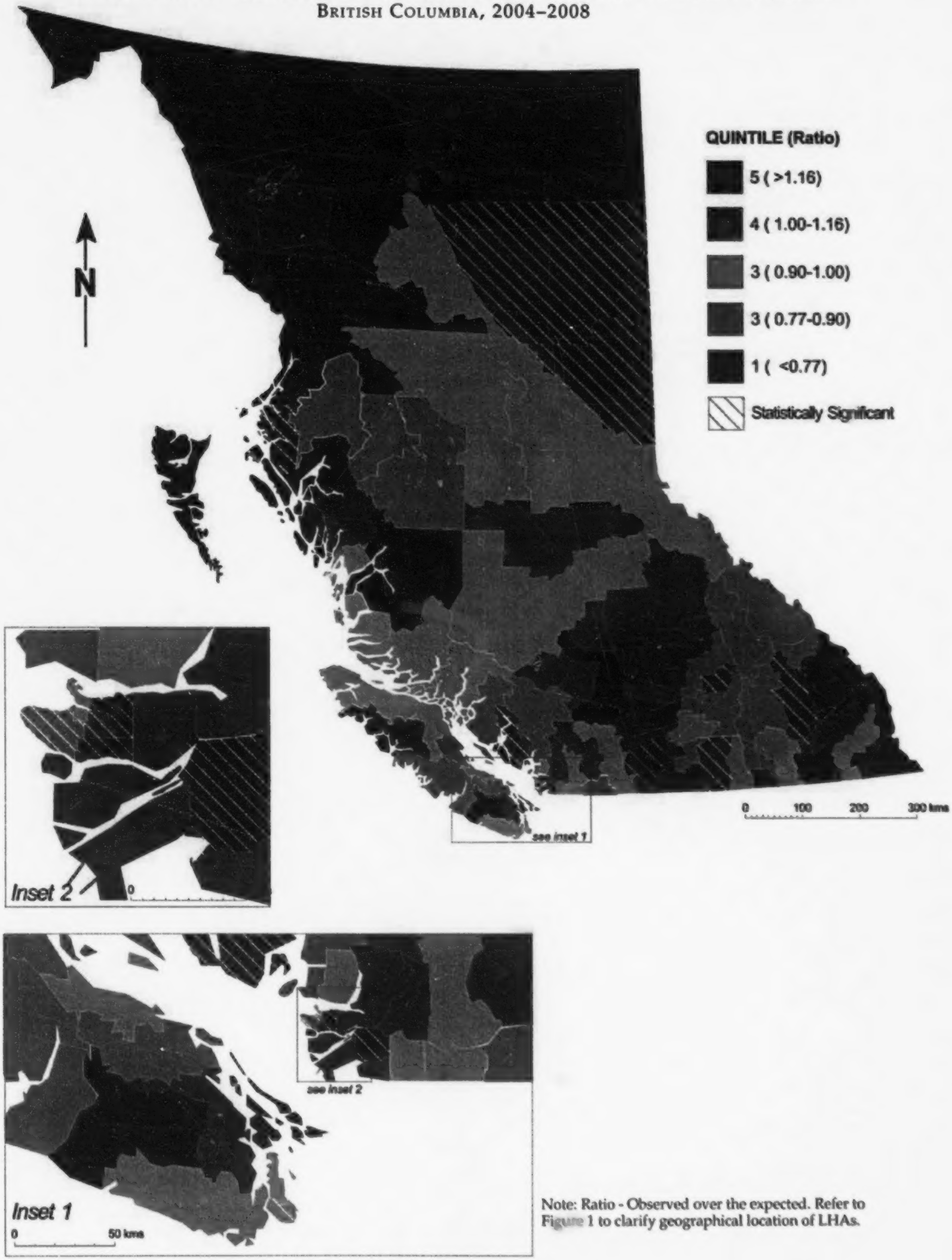
Local Health Area		2004–2008 Low Birth Weight Live Births				2009 Gestational Age (in Weeks)					
		Observed	Ratio	(p)	Rate	<37	37–41	42+	N.S.	Total	Rate
001	Fernie	27	0.72		40.30	4	2	-	-	6	36.14
002	Cranbrook	65	0.99		55.32	7	4	-	-	11	42.80
003	Kimberley	22	1.15		63.95	3	2	-	-	5	60.24
004	Windermere	17	0.75		41.87	10	4	-	-	14	138.61
005	Creston	38	1.21		67.74	4	2	-	-	6	44.44
006	Kootenay Lake	2	0.23	+	12.99	3	-	-	-	3	136.36
007	Nelson	59	0.92		51.22	9	1	-	-	10	40.65
009	Castlegar	20	0.79		44.15	2	1	-	-	3	35.71
010	Arrow Lakes	8	0.86		47.90	-	-	-	-	-	-
011	Trail	52	1.23		68.51	6	3	-	-	9	55.56
012	Grand Forks	17	0.91		51.05	2	1	-	-	3	57.69
013	Kettle Valley	2	0.28	+	15.38	1	-	-	-	1	83.33
014	Southern Okanagan	48	1.34		74.65	6	6	-	-	12	102.56
015	Penticton	77	0.88		49.08	9	6	-	-	15	44.91
016	Keremeos	6	0.60		33.52	4	1	-	-	5	128.21
017	Princeton	14	1.86	*	103.70	2	-	-	-	2	90.91
018	Golden	16	0.83		46.24	2	2	-	-	4	72.73
019	Revelstoke	17	0.82		45.70	1	4	-	-	5	56.82
020	Salmon Arm	60	0.85		47.43	9	6	-	-	15	56.82
021	Armstrong - Spallumcheen	20	0.86		47.96	1	1	-	-	2	26.32
022	Vernon	133	0.90		50.19	27	7	-	-	34	52.39
023	Central Okanagan	386	0.93		52.17	60	21	-	-	81	47.82
024	Kamloops	282	1.05		58.81	48	17	-	-	65	59.31
025	100 Mile House	31	1.09		61.14	5	1	-	-	6	54.55
026	North Thompson	13	1.02		57.02	3	1	-	-	4	90.91
027	Cariboo - Chilcotin	79	0.98		54.79	12	3	-	-	15	53.19
028	Quesnel	69	1.02		56.70	13	2	-	-	15	58.14
029	Lillooet	15	1.07		59.76	-	1	-	-	1	27.03
030	South Cariboo	22	1.32		73.83	3	1	-	-	4	64.52
031	Merritt	23	0.71		39.38	3	2	-	-	5	38.46
032	Hope	19	0.92		51.63	1	2	-	-	3	43.48
033	Chilliwack	239	0.89		49.68	42	6	-	-	48	44.32
034	Abbotsford	425	0.92		51.27	85	26	-	-	111	62.89
035	Langley	341	0.94		52.66	47	19	-	-	66	44.81
037	Delta	251	1.00		56.06	40	17	-	-	57	68.43
038	Richmond	460	1.01		56.41	62	26	-	-	88	49.19
040	New Westminster	215	1.18	*	65.73	33	10	-	-	43	58.74
041	Burnaby	629	1.04		58.08	90	42	-	-	132	55.77
042	Maple Ridge	278	1.07		59.82	36	6	-	-	42	41.96
043	Coquitlam	607	1.06		59.05	110	34	-	-	144	63.46
044	North Vancouver	329	0.96		53.58	56	25	-	-	81	66.45
045	West Vancouver-Bowen Is.	64	0.81		45.17	5	3	-	-	8	31.50
046	Sunshine Coast	39	0.70	*	39.20	10	2	-	-	12	56.34
047	Powell River	30	0.80		44.78	4	-	-	-	4	27.40
048	Howe Sound	103	0.85		47.47	19	5	-	-	24	50.96
049	Bella Coola Valley	18	1.36		75.95	3	-	-	-	3	96.77
050	Queen Charlotte	17	1.20		67.19	-	-	-	-	-	-
051	Snow Country	3	1.85		103.45	-	-	-	-	-	-
052	Prince Rupert	34	0.71	*	39.72	5	-	-	-	5	27.78
053	Upper Skeena	10	0.56		31.15	2	-	-	-	2	25.64
054	Smithers	49	0.81		45.04	10	3	-	-	13	59.91
055	Burns Lake	21	0.86		47.95	4	2	-	-	6	60.61
056	Nechako	56	0.93		51.80	9	3	-	-	12	51.95
057	Prince George	291	0.96		53.58	49	24	-	-	73	64.43
059	Peace River South	63	0.73	*	40.83	13	3	-	-	16	47.62
060	Peace River North	113	0.73	*	40.71	22	13	-	-	35	56.82
061	Greater Victoria	451	0.91	*	50.63	65	25	-	-	90	48.89
062	Sooke	179	0.98		54.92	22	8	-	-	30	39.53
063	Saanich	107	0.98		54.62	15	3	-	-	18	46.75
064	Gulf Islands	17	0.70		39.35	1	3	-	-	4	48.78
065	Cowichan	164	1.12		62.60	17	11	-	-	28	51.57
066	Lake Cowichan	16	1.26		70.48	-	-	-	-	-	-
067	Ladysmith	46	1.10		61.42	5	4	-	-	9	64.29
068	Nanaimo	211	0.88		48.94	41	11	-	-	52	56.34
069	Qualicum	65	0.94		52.67	7	7	-	-	14	59.07
070	Alberni	80	0.89		49.50	13	2	-	-	15	42.13
071	Courtenay	121	0.90		50.42	18	6	-	-	24	48.58
072	Campbell River	95	0.92		51.55	19	5	-	-	24	58.11
075	Mission	119	0.95		52.80	19	3	-	-	22	48.46
076	Agassiz - Harrison	29	1.07		59.55	4	1	-	-	5	51.02
077	Summerland	13	0.66		36.62	1	4	-	-	5	64.94
078	Enderby	11	0.55	*	30.47	3	-	-	-	3	40.00
080	Kitimat	19	0.76		42.22	3	2	-	-	5	42.74
081	Fort Nelson	20	0.70		39.06	5	-	-	-	5	53.19
083	Central Coast	8	0.97		54.05	-	-	-	-	-	-
084	Vancouver Island West	4	0.60		33.33	-	-	-	-	-	-
085	Vancouver Island North	41	0.96		53.59	10	-	-	-	10	62.89
087	Stikine	3	2.15		120.00	2	-	-	-	2	200.00
088	Terrace	58	0.85		47.46	14	2	-	-	16	61.78
092	Nisga'a	6	0.67		37.27	1	2	-	-	3	75.00
094	Telegraph Creek	-	-		-	-	-	-	-	-	-
161	Vancouver - City Centre	224	0.90		50.47	46	16	-	-	62	58.44
162	Vancouver - Downtown E.side	156	1.21	*	67.59	41	3	-	-	44	79.14
163	Vancouver - North East	364	1.19	*	66.19	40	29	-	-	69	62.61
164	Vancouver - Westside	273	0.87	*	48.48	45	16	-	-	61	54.42
165	Vancouver - Midtown	318	1.12	*	62.72	49	12	-	-	61	57.98
166	Vancouver - South	462	1.26	*	70.17	52	21	-	-	73	56.11
201	Surrey	1,548	1.17	*	65.14	221	109	-	-	330	63.65
202	South Surrey/White Rock	162	1.08		60.20	23	3	-	-	26	49.06
	PROVINCIAL TOTAL	**11,738**	**1.00**		**55.85**	**1,818**	**681**	-	-	**2,499**	**55.65**

Note: Low Birth Weight – birth weight less than 2,500 grams. Ratio – observed over the expected low birth weight live births. * Statistical testing indicates that observed low birth weight live births are significantly different from the expected (p<0.05, two tailed). Rate per 1,000 live births in the specified area. Total includes residents with unknown LHA. N.S. - Not Stated.

Figure 32

LOW BIRTH WEIGHT LIVE BIRTHS BY LOCAL HEALTH AREA

British Columbia, 2004–2008


QUINTILE (Ratio)
5 (>1.16)
4 (1.00-1.16)
3 (0.90-1.00)
3 (0.77-0.90)
1 (<0.77)
Statistically Significant
N
0 100 200 300 kms
see inset 1
Inset 2
0
see inset 2
Inset 1
0 50 kms

Note: Ratio - Observed over the expected. Refer to Figure 1 to clarify geographical location of LHAs.

Births – Maternal Complications and Perinatal Conditions

Both maternal complications and perinatal conditions can be used as health status indicators. Only diagnoses affecting pregnancy, labour, or delivery were selected for the maternal complications part of this report. Perinatal conditions consist of diagnoses affecting the baby shortly before, during, or after birth.

The maternal complications shown in Table 17 are limited to those diagnoses that affected pregnancy, labour, or delivery. Note that an unlimited number of complications can be noted for each birth, so the total number of maternal complications can be greater than the number of live births with maternal complications.

Assisted or Surgical Delivery and Maternal Abnormalities of the Pelvic Organs were the two most frequent diagnostic categories of maternal complications in 2009 and the previous five years. The proportions of age group births that had pelvic organ abnormalities (including conditions such as cervical incompetence as well as scarring from surgeries such as previous cesarean sections) were observed more frequently in older mothers. Births complicated by Maternal Abnormality of Pelvic Organs made up 1.8 percent of births to mothers under 20 years old compared to 21.0 percent of births for mothers 40 years and over. The proportions of age group births that had at least one complication are shown along the bottom of the table.

Elderly primigravida (ICD-10 code Z35.5) refers to women aged 35 or older who are experiencing their first pregnancy. This condition has always been recorded; however, the ICD-9 code (659.5) was included with other complications of labour and delivery, while ICD-10 puts elderly primigravida in the chapter with factors influencing health status and contact with health services. Elderly primigravida comprised 5.4 percent of all maternal complications in 2004-2008 and 5.6 percent in 2009 as shown in Table 17.

Table 18 shows the incidence of live births with maternal complications by LHA for the period 2004-2008 and for the year 2009. The observed births columns show the number of live births with complications stratified by maternal LHA of residence. The ratios indicate the number of observed births divided by the number that would be expected if the LHA had the provincial rates and (p) indicates those LHAs where the observed number was significantly different from the expected.

In 2009, there were statistically significant low ratios in 8 LHAs, whereas 6 LHAs had high ratios that were statistically significant. In the 2004-2008 period, 19 LHAs had low ratios that were statistically significant and 14 LHAs had high ratios that were statistically significant.

The map in Figure 33 shows the LHAs identified in their quintile ranks by their 2004-2008 ratios of observed births with maternal complications versus the expected number of births with such conditions. LHAs with the highest ratios are coloured dark blue, and those with the lowest ratios are dark grey.

The conditions listed in Table 19 consist of diagnoses affecting the baby shortly before, during, or after birth. The table shows the number and percent of all perinatal conditions in each condition category for 2004-2008 and 2009. The 2009 portion of the table also shows the conditions by maternal age group. Again, an unlimited number of complications can be noted for each birth, so the total number of perinatal conditions at the bottom of the table may exceed the number of live births with at least one perinatal condition.

Intrauterine hypoxia and birth asphyxia accounted for most of the perinatal conditions in both time periods (42.6 percent in 2004-2008 and 42.7 percent in 2009). Conditions related to short gestation and those related to long gestation or high birth weight together accounted for 36.6 percent of the conditions in 2009 and 37.7 percent in the 2004-2008 period.

Table 20 shows the incidence of live births with perinatal conditions by the mother's LHA of residence for the period 2004-2008 and for the year 2009. In 2009, there were 21 LHAs where the observed number of perinatal conditions was significantly different from the expected number, and in 13 of these, the observed number was significantly higher.

Figure 34 map shows the LHAs identified in their quintile ranks by their 2004-2008 ratios of observed births with perinatal conditions to the expected number of births with such conditions. LHAs with the highest ratios are coloured dark blue, and those with the lowest ratios are dark grey.

TABLE 17

MATERNAL COMPLICATIONS OF PREGNANCY AND DELIVERY IN LIVE BIRTHS BY AGE OF MOTHER

BRITISH COLUMBIA, 2004–2008 AND 2009

		2004–2008		2009						
				Age of Mother (in Years)						
Maternal Complications	ICD-10 Code(s)	Total	Percent	<20	20–29	30–39	40+	N.S.	Total	Percent
Hypertension/hypertensive disorders in pregnancy	O10-O11, O13, O16	2,532	1.7	20	206	274	43	-	543	1.7
Edema and proteinuria without hypertension	O12	30	0.0	-	-	1	-	-	1	0.0
Pre-eclampsia/eclampsia	O14-O15	935	0.6	12	92	111	15	-	230	0.7
Hemorrhage in early pregnancy	O20	3	0.0	-	1	2	-	-	3	0.0
Hyperemesis gravidarum	O21	65	0.0	1	4	5	1	-	11	0.0
Other maternal disorders predominantly related to pregnancy	O22-O23, O25-O29	1,826	1.2	14	148	181	13	-	356	1.1
Diabetes in pregnancy	O24	2,303	1.5	5	149	308	55	-	517	1.6
Multiple gestation and related complications	O30-O31	6,255	4.2	20	435	791	139	-	1,385	4.2
Fetal malpresentation	O32	6,807	4.6	35	580	782	66	-	1,463	4.5
Disproportion	O33	440	0.3	2	27	36	1	-	66	0.2
Maternal abnormality of pelvic organs	O34	25,209	16.9	26	1,646	3,541	392	-	5,605	17.1
Disorders of amniotic fluid and membranes	O40-O42	4,251	2.9	19	369	480	49	-	917	2.8
Placental disorders	O43-O45, O73	2,181	1.5	13	171	284	41	-	509	1.6
Antepartum hemorrhage	O46	396	0.3	2	30	46	6	-	84	0.3
Prolonged pregnancy	O48	1,275	0.9	3	102	124	7	-	236	0.7
Preterm labour and delivery	O60	9,095	6.1	82	786	857	88	-	1,813	5.5
Abnormalities of forces of labour	O62-O63	6,261	4.2	34	622	783	57	-	1,496	4.6
Obstructed labour	O64-O66	11,639	7.8	90	1,140	1,254	78	-	2,562	7.8
Intrapartum hemorrhage	O67	-	-	-	-	-	-	-	-	-
Evidence of fetal distress	O68	8,615	5.8	64	833	1,024	91	-	2,012	6.1
Cord complications	O69	2,413	1.6	21	242	273	20	-	556	1.7
Obstetrical trauma	O70-O71	1,506	1.0	12	193	175	6	-	386	1.2
Postpartum hemorrhage	O72	1,995	1.3	30	234	228	16	-	508	1.6
Assisted or surgical delivery - no cause given[1]	O81-O82	30,596	20.5	148	2,692	3,320	325	-	6,485	19.8
Maternal and puerperal infections	O85-O86, O98, A34	287	0.2	6	43	28	3	-	80	0.2
Other puerperal complications	O87-O92	63	0.0	-	6	7	1	-	14	0.0
Maternal noninfectious diseases complicating the pregnant state	O99	2,200	1.5	22	204	266	27	-	519	1.6
Elderly primigravida	Z355	8,096	5.4	-	-	1,579	255	-	1,834	5.6
Maternal drug use	O355	457	0.3	4	36	29	3	-	72	0.2
Other maternal complications	O00-O08, O350-O353, O356-O36, O47, O61, O74-O75, O95-O97	11,312	7.6	92	1,050	1,211	125		2,478	7.6
Total maternal complications		**149,043**	**100.0**	**777**	**12,041**	**18,000**	**1,923**		**32,741**	**100.0**
Live births with the above	**- Number**	**109,889**		**571**	**8,954**	**12,769**	**1,256**	**-**	**23,550**	
maternal complications	**- Percent(*)**	**52.3**		**40.0**	**47.4**	**56.1**	**67.4**		**52.4**	

Note: Percent based upon maternal complications. Percent (*) based upon live births for the specified maternal age group.
[1]Where no other complication code is found. Total percentage may not add up to 100 due to rounding.
N.S. - Not Stated. Non-residents are excluded.

Vital Statistics Information Box

TOP 25 BABY NAMES IN 2009

Each year the British Columbia Vital Statistics Agency produces a list of the most chosen baby names. The table below provides the top 25 names. Alternate spellings of names that sound alike (such as Catherine, Katherine, and Katharine) are not combined. The complete 2009 list, as well as lists for several previous years can be found at http://www.vs.gov.bc.ca/babynames/index.html. In 2009, 679 boys' names and 756 girls' names were chosen for five or more newborns.

	Baby Boys		Baby Girls	
Rank	Name	Number	Name	Number
1	Ethan	300	Olivia	243
2	Liam	286	Emma	228
3	Jacob	225	Sophia	226
4	Logan	217	Ava	223
5	Noah	205	Emily	201
6	Matthew	203	Isabella	184
7	Lucas	197	Chloe	183
8	Alexander	195	Lily	152
9	Benjamin	195	Hannah	151
10	Nathan	187	Ella	145
11	Owen	182	Sophie	136
12	Ryan	173	Abigail	131
13	Joshua	168	Grace	131
14	Mason	164	Alexis	126
15	William	164	Madison	120
16	Daniel	152	Sarah	116
17	James	151	Maya	108
18	Jack	148	Charlotte	107
19	Samuel	142	Avery	102
20	Carter	141	Brooklyn	100
21	Oliver	141	Elizabeth	98
22	Evan	140	Claire	97
23	Dylan	138	Taylor	96
24	Jayden	138	Julia	91
25	Aiden	135	Hailey	83

Table 18

MATERNAL COMPLICATIONS OF PREGNANCY AND DELIVERY IN LIVE BIRTHS BY LOCAL HEALTH AREA,
British Columbia, 2004–2008 and 2009

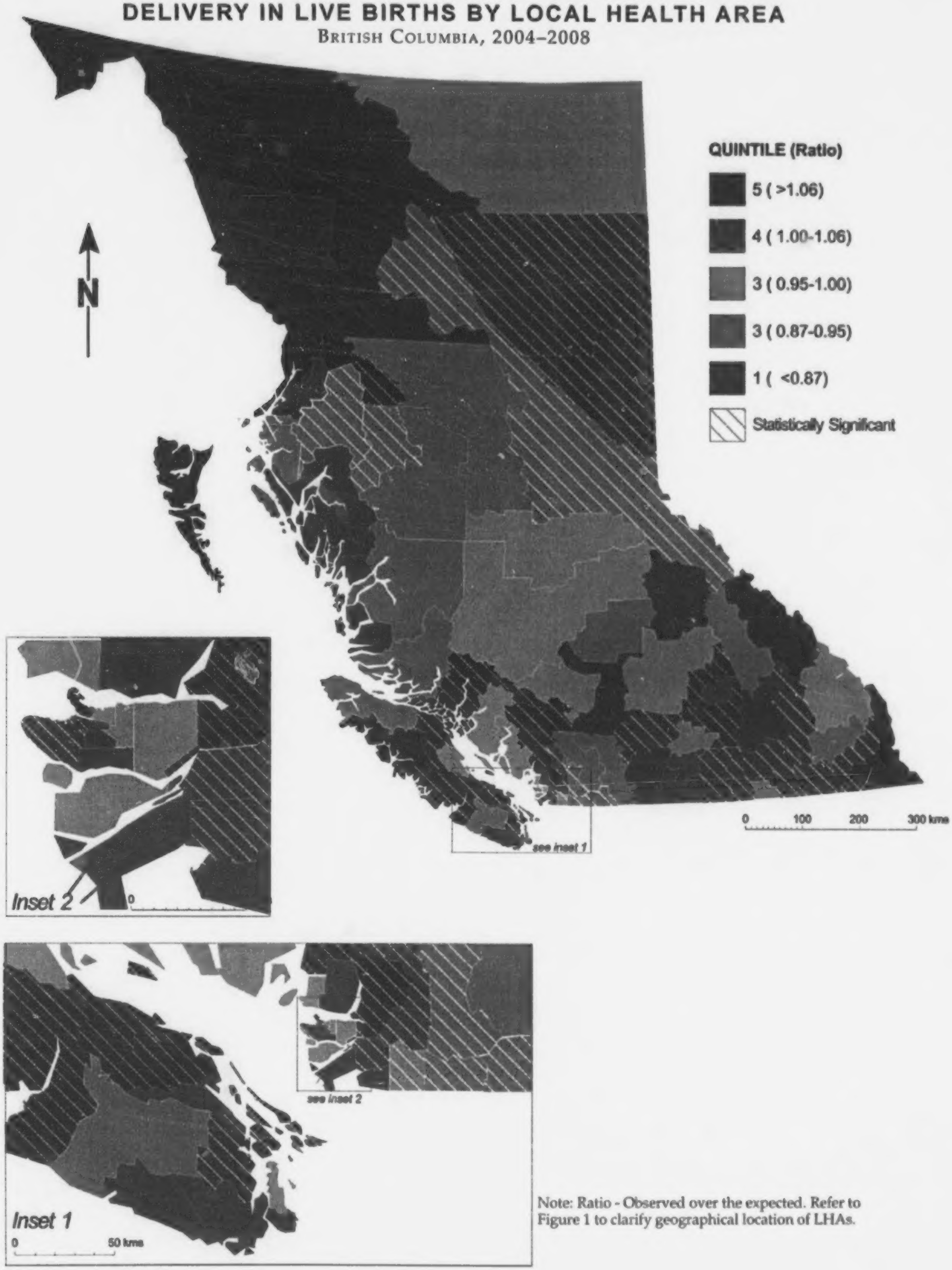
Local Health Area		2004–2008					2009					
		Observed Births	Ratio	(p)	Percent	Total Live Births	Observed Births	Expected Births	Ratio	(p)	Percent	Total Live Births
001	Fernie	386	1.10		57.6	670	108	87.1	1.24	*	65.1	166
002	Cranbrook	518	0.84	*	44.1	1,175	89	134.8	0.66	*	34.6	257
003	Kimberley	157	0.87		45.6	344	34	43.5	0.78		41.0	83
004	Windermere	209	0.98		51.5	406	43	53.0	0.81		42.6	101
005	Creston	228	0.78	*	40.6	561	52	70.8	0.73	*	38.5	135
006	Kootenay Lake	46	0.57	*	29.9	154	10	11.5	0.87		45.5	22
007	Nelson	428	0.71	*	37.2	1,152	105	129.0	0.81	*	42.7	246
009	Castlegar	198	0.84	*	43.7	453	41	44.1	0.93		48.8	84
010	Arrow Lakes	70	0.80		41.9	167	13	12.6	1.03		54.2	24
011	Trail	384	0.97		50.6	759	91	85.0	1.07		56.2	162
012	Grand Forks	145	0.83	*	43.5	333	22	27.3	0.81		42.3	52
013	Kettle Valley	35	0.51	*	26.9	130	4	6.3	0.64		33.3	12
014	Southern Okanagan	344	1.02		53.5	643	54	61.4	0.88		46.2	117
015	Penticton	841	1.03		53.6	1,569	183	175.2	1.04		54.8	334
016	Keremeos	98	1.05		54.7	179	19	20.5	0.93		48.7	39
017	Princeton	60	0.85		44.4	135	11	11.5	0.95		50.0	22
018	Golden	194	1.07		56.1	346	31	28.8	1.07		56.4	55
019	Revelstoke	184	0.95		49.5	372	49	46.1	1.06		55.7	88
020	Salmon Arm	778	1.18	*	61.5	1,265	153	138.4	1.11		58.0	264
021	Armstrong - Spallumcheen	235	1.08		56.4	417	37	39.9	0.93		48.7	76
022	Vernon	1,481	1.07	*	55.9	2,650	349	340.3	1.03		53.8	649
023	Central Okanagan	3,785	0.98		51.2	7,399	914	888.3	1.03		54.0	1,694
024	Kamloops	2,441	0.97		50.9	4,795	570	574.7	0.99		52.0	1,096
025	100 Mile House	236	0.89		46.5	507	48	57.7	0.83		43.6	110
026	North Thompson	98	0.82		43.0	228	20	23.1	0.87		45.5	44
027	Cariboo - Chilcotin	747	0.99		51.8	1,442	152	147.9	1.03		53.9	282
028	Quesnel	606	0.95		49.8	1,217	139	135.3	1.03		53.9	258
029	Lillooet	130	0.99		51.8	251	20	19.4	1.03		54.1	37
030	South Cariboo	134	0.86		45.0	298	28	32.5	0.86		45.2	62
031	Merritt	258	0.84	*	44.2	584	56	68.2	0.82		43.1	130
032	Hope	181	0.94		49.2	368	25	36.2	0.69		36.2	69
033	Chilliwack	2,371	0.94	*	49.3	4,811	492	567.9	0.87	*	45.4	1,083
034	Abbotsford	3,880	0.90	*	46.8	8,290	849	925.6	0.92	*	48.1	1,765
035	Langley	3,225	0.95	*	49.8	6,475	741	772.4	0.96		50.3	1,473
037	Delta	2,408	1.03		53.8	4,477	459	436.8	1.05		55.1	833
038	Richmond	4,198	0.98		51.5	8,154	914	938.2	0.97		51.1	1,789
040	New Westminster	1,899	1.11	*	58.1	3,271	439	383.9	1.14	*	60.0	732
041	Burnaby	5,559	0.98		51.3	10,829	1,241	1,241.3	1.00		52.4	2,367
042	Maple Ridge	2,539	1.04	*	54.6	4,647	520	524.9	0.99		51.9	1,001
043	Coquitlam	5,988	1.11	*	58.2	10,280	1,292	1,189.9	1.09	*	56.9	2,269
044	North Vancouver	3,265	1.02		53.2	6,140	652	639.3	1.02		53.5	1,219
045	West Vancouver-Bowen Is.	732	0.99		51.7	1,417	139	133.2	1.04		54.7	254
046	Sunshine Coast	500	0.96		50.3	995	118	111.7	1.06		55.4	213
047	Powell River	340	0.97		50.7	670	69	76.6	0.90		47.3	146
048	Howe Sound	1,225	1.08	*	56.5	2,170	273	247.0	1.11		58.0	471
049	Bella Coola Valley	115	0.93		48.5	237	15	16.3	0.92		48.4	31
050	Queen Charlotte	144	1.09		56.9	253	19	19.4	0.98		51.4	37
051	Snow Country	18	1.19		62.1	29	1	1.6	0.64		33.3	3
052	Prince Rupert	413	0.92		48.2	856	94	94.4	1.00		52.2	180
053	Upper Skeena	194	1.16	*	60.4	321	49	40.9	1.20		62.8	78
054	Smithers	519	0.91	*	47.7	1,088	102	113.8	0.90		47.0	217
055	Burns Lake	213	0.93		48.6	438	40	51.9	0.77		40.4	99
056	Nechako	526	0.93		48.7	1,081	123	121.1	1.02		53.2	231
057	Prince George	2,555	0.90	*	47.0	5,431	552	594.2	0.93		48.7	1,133
059	Peace River South	620	0.77	*	40.2	1,543	143	176.2	0.81	*	42.6	336
060	Peace River North	1,140	0.79	*	41.1	2,776	262	323.0	0.81	*	42.5	616
061	Greater Victoria	4,709	1.01		52.9	8,908	1,023	965.4	1.06		55.6	1,841
062	Sooke	1,778	1.04		54.6	3,259	414	398.0	1.04		54.5	759
063	Saanich	975	0.95		49.8	1,959	177	201.9	0.88		46.0	385
064	Gulf Islands	174	0.77	*	40.3	432	33	43.0	0.77		40.2	82
065	Cowichan	1,185	0.86	*	45.2	2,620	246	284.8	0.86	*	45.3	543
066	Lake Cowichan	111	0.94		48.9	227	23	22.0	1.04		54.8	42
067	Ladysmith	404	1.03		53.9	749	71	73.4	0.97		50.7	140
068	Nanaimo	2,641	1.17	*	61.3	4,311	554	484.0	1.14	*	60.0	923
069	Qualicum	719	1.11	*	58.3	1,234	125	124.3	1.01		52.7	237
070	Alberni	1,013	1.20	*	62.7	1,616	205	186.7	1.10		57.6	356
071	Courtenay	1,197	0.95		49.9	2,400	237	259.1	0.91		48.0	494
072	Campbell River	1,109	1.15	*	60.2	1,843	244	216.6	1.13		59.1	413
075	Mission	1,080	0.92	*	47.9	2,254	223	238.1	0.94		49.1	454
076	Agassiz - Harrison	235	0.92		48.3	487	49	51.4	0.95		50.0	98
077	Summerland	190	1.02		53.5	355	46	40.4	1.14		59.7	77
078	Enderby	190	1.01		52.6	361	39	39.3	0.99		52.0	75
080	Kitimat	236	1.00		52.4	450	59	61.4	0.96		50.4	117
081	Fort Nelson	256	0.96		50.0	512	48	49.3	0.97		51.1	94
083	Central Coast	79	1.02		53.4	148	10	12.1	0.83		43.5	23
084	Vancouver Island West	70	1.12		58.3	120	14	12.6	1.11		58.3	24
085	Vancouver Island North	378	0.94		49.4	765	72	83.4	0.86		45.3	159
087	Stikine	14	1.07		56.0	25	8	5.2	1.53		80.0	10
088	Terrace	581	0.91	*	47.5	1,222	113	135.8	0.83		43.6	259
092	Nisga'a	86	1.02		53.4	161	19	21.0	0.91		47.5	40
094	Telegraph Creek	21	0.84		43.8	48	4	4.7	0.85		44.4	9
161	Vancouver - City Centre	2,670	1.15	*	60.2	4,438	632	556.4	1.14	*	59.6	1,061
162	Vancouver - Downtown E.side	1,199	0.99		51.9	2,308	296	291.6	1.02		53.2	556
163	Vancouver - North East	2,830	0.98		51.5	5,499	609	577.9	1.05		55.3	1,102
164	Vancouver - Westside	3,061	1.04	*	54.4	5,631	604	587.9	1.03		53.9	1,121
165	Vancouver - Midtown	2,692	1.02		53.1	5,070	611	551.7	1.11	*	58.1	1,052
166	Vancouver - South	3,434	1.00		52.2	6,584	677	682.3	0.99		52.0	1,301
201	Surrey	12,875	1.04	*	54.2	23,763	2,733	2,719.0	1.01		52.7	5,185
202	South Surrey/White Rock	1,452	1.03		54.0	2,691	264	277.9	0.95		49.8	530
	PROVINCIAL TOTAL	**109,889**	**1.00**		**52.3**	**210,153**	**23,550**	**23,550.0**	**1.00**		**52.4**	**44,908**

Note: *Statistical testing indicates that the observed number of births with maternal complications is signficantly different from the expected (p<0.05, two tailed). Ratio - observed over expected. Percent of observed births is based on total live births. Total includes residents with unknown LHA. Non-residents are excluded.

Figure 33

MATERNAL COMPLICATIONS OF PREGNANCY AND DELIVERY IN LIVE BIRTHS BY LOCAL HEALTH AREA

British Columbia, 2004–2008


N
QUINTILE (Ratio)
5 (>1.06)
4 (1.00-1.06)
3 (0.95-1.00)
3 (0.87-0.95)
1 (<0.87)
Statistically Significant
0
100
200
300 kms
see inset 1
Inset 2
0
see inset 2
Inset 1
0
50 kms

Note: Ratio - Observed over the expected. Refer to Figure 1 to clarify geographical location of LHAs.

TABLE 19

PERINATAL CONDITIONS IN LIVE BIRTHS BY AGE OF MOTHER

BRITISH COLUMBIA, 2004–2008 AND 2009

		2004–2008		2009						
				Age of Mother (in Years)						
Perinatal Conditions	ICD-10 Code	Total	Percent	<20	20–29	30–39	40+	N.S.	Total	Percent
Fetus/newborn affected by maternal conditions that may be unrelated to present pregnancy	P00	41	0.0	1	9	18	1	-	29	0.1
Complications of pregnancy, labour and delivery	P01, P03	11,596	12.6	66	1,046	1,419	192	-	2,723	13.7
Fetus/newborn affected by complications of placenta, cord and membranes	P02	2,871	3.1	25	308	395	42	-	770	3.9
Fetus affected by noxious influences transmitted via placenta (or breast milk)	P04	35	0.0	3	9	8	-	-	20	-
Slow fetal growth and malnutrition	P05	2,170	2.4	12	116	129	26	-	283	1.4
Perinatal disorders related to short gestation	P072, P073	15,529	16.9	111	1,209	1,646	218	-	3,184	16.0
Disorders related to long gestation or high birth weight	P08	19,051	20.7	129	1,708	2,074	168	-	4,079	20.6
Perinatal birth trauma	P10-P15	304	0.3	1	41	27	1	-	70	0.4
Intrauterine hypoxia and birth asphyxia	P20-P21	39,109	42.6	350	3,825	3,935	354	-	8,464	42.7
Respiratory conditions of fetus and newborn	P22-P28	524	0.6	3	36	38	3	-	80	0.4
Cardiovascular disorders originating in the perinatal period	P29	-	0.0	-	-	-	-	-	-	0.0
Infections specific to the perinatal period	P35-P39	33	0.0	-	1	-	-	-	1	0.0
Fetal and neonatal hemorrhage	P50-P52, P54	90	0.1	-	3	11	2	-	16	0.1
Perinatal jaundice/other hematological disorders	P53, P55-P61	45	0.0	-	3	5	1	-	9	0.0
Perinatal endocrine and metabolic disorders	P70-P74	35	0.0	-	2	2	-	-	4	0.0
Digestive system disorders of fetus and newborn	P76-P78	5	0.0	-	-	-	-	-	-	0.0
Perinatal conditions of the integument and of temperature regulation	P80-P83	145	0.2	1	24	11	1	-	37	0.2
Other disorders originating in the perinatal period	P90-P96	255	0.3	5	34	30	3	-	72	0.4
All Perinatal Conditions		**91,838**	**100.0**	**707**	**8,374**	**9,748**	**1,012**	**-**	**19,841**	**100.0**
Live births with the above perinatal conditions	**- Number**	**72,248**		**567**	**6,600**	**7,659**	**720**	**-**	**15,546**	
	- Percent(*)	**34.4**		**39.7**	**35.0**	**33.7**	**38.6**		**34.6**	

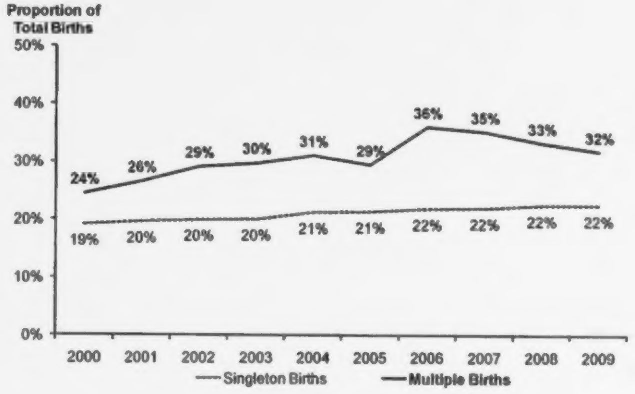
Note: Percent based upon perinatal conditions. Percent (*) based upon live births for the maternal age group. Total percentage may not add up to 100 due to rounding. N.S. - Not stated. Non-residents are excluded.

Vital Statistics Information Box

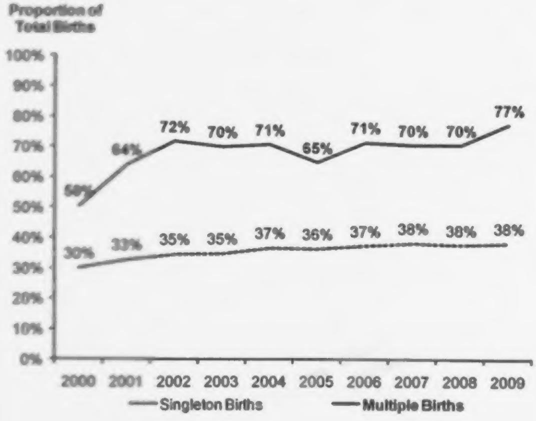
BIRTH AND OLDER MOTHERS IN BRITISH COLUMBIA, 2000 - 2009

Older mothers, those aged 35 and over, have increased their share of the total births to women in British Columbia. Since 2000, the share of multiple births attributable to older mothers has increased by almost one third. Most of these births are via cesarean section; however, the proportion of these births considered to be Low Birth Weight has remained relatively stable.

PROPORTION OF SINGLETON AND MULTIPLE BIRTHS
TO MOTHERS AGED 35 AND OLDER
BRITISH COLUMBIA, 2000 - 2009



PROPORTION OF SINGLETON AND MULTIPLE BIRTHS
TO MOTHERS AGED 35 AND OLDER BIRTHED
VIA CESAREAN SECTION
BRITISH COLUMBIA, 2000 - 2009



PROPORTION OF SINGLETON AND MULTIPLE BIRTHS
TO MOTHERS AGED 35 AND OLDER WITH
LOW BIRTH WEIGHT (<2500 GRAMS)
BRITISH COLUMBIA, 2000 - 2009

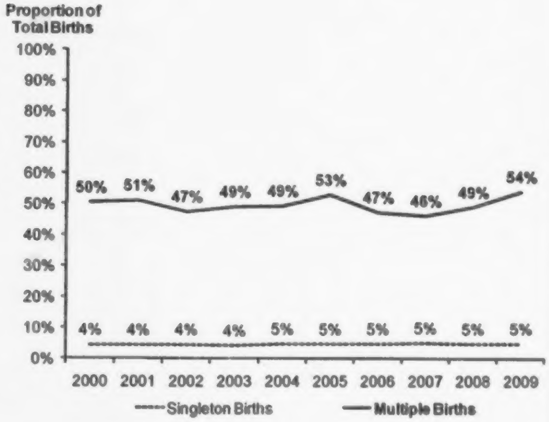


Table 20

PERINATAL CONDITIONS IN LIVE BIRTHS BY LOCAL HEALTH AREA,

BRITISH COLUMBIA, 2004–2008 AND 2009

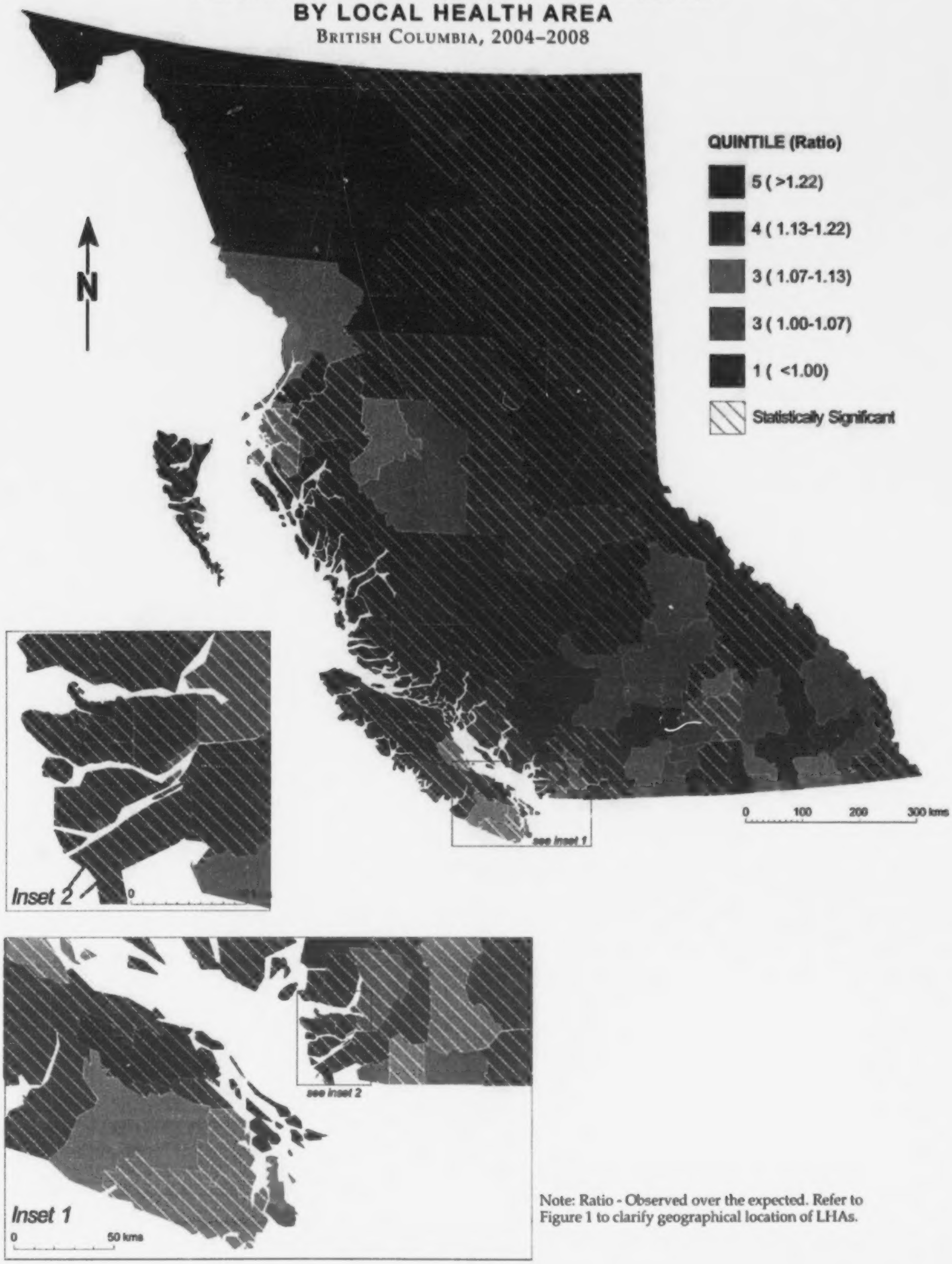
Local Health Area		2004–2008					2009					
		Observed Births	Ratio	(p)	Percent	Total Live Births	Observed Births	Expected Births	Ratio	(p)	Percent	Total Live Births
001	Fernie	262	1.14	*	39.1	670	60	57.5	1.04		36.1	166
002	Cranbrook	427	1.06		36.3	1,175	78	89.0	0.88		30.4	257
003	Kimberley	137	1.16		39.8	344	28	28.7	0.97		33.7	83
004	Windermere	148	1.06		36.5	406	41	35.0	1.17		40.6	101
005	Creston	211	1.09		37.6	561	47	46.7	1.01		34.8	135
006	Kootenay Lake	49	0.93		31.8	154	10	7.6	1.31		45.5	22
007	Nelson	385	0.97		33.4	1,152	91	85.2	1.07		37.0	246
009	Castlegar	170	1.09		37.5	453	28	29.1	0.96		33.3	84
010	Arrow Lakes	59	1.03		35.3	167	12	8.3	1.44		50.0	24
011	Trail	287	1.10		37.8	759	67	56.1	1.19		41.4	162
012	Grand Forks	101	0.88		30.3	333	24	18.0	1.33		46.2	52
013	Kettle Valley	27	0.60	*	20.8	130	2	4.2	0.48		16.7	12
014	Southern Okanagan	202	0.91		31.4	643	38	40.5	0.94		32.5	117
015	Penticton	573	1.06		36.5	1,569	112	115.6	0.97		33.5	334
016	Keremeos	65	1.06		36.3	179	16	13.5	1.19		41.0	39
017	Princeton	50	1.08		37.0	135	7	7.6	0.92		31.8	22
018	Golden	155	1.30	*	44.8	346	22	19.0	1.16		40.0	55
019	Revelstoke	173	1.35	*	46.5	372	39	30.5	1.28		44.3	88
020	Salmon Arm	530	1.22	*	41.9	1,265	103	91.4	1.13		39.0	264
021	Armstrong - Spallumcheen	149	1.04		35.7	417	26	26.3	0.99		34.2	76
022	Vernon	974	1.07	*	36.8	2,650	249	224.7	1.11		38.4	649
023	Central Okanagan	2,568	1.01		34.7	7,399	653	586.4	1.11	*	38.5	1,694
024	Kamloops	1,699	1.03		35.4	4,795	426	379.4	1.12	*	38.9	1,096
025	100 Mile House	215	1.23	*	42.4	507	48	38.1	1.26		43.6	110
026	North Thompson	82	1.05		36.0	228	16	15.2	1.05		36.4	44
027	Cariboo - Chilcotin	663	1.34	*	46.0	1,442	150	97.6	1.54	*	53.2	282
028	Quesnel	486	1.16	*	39.9	1,217	123	89.3	1.38	*	47.7	258
029	Lillooet	100	1.16		39.8	251	18	12.8	1.41		48.6	37
030	South Cariboo	105	1.02		35.2	298	26	21.5	1.21		41.9	62
031	Merritt	198	0.99		33.9	584	60	45.0	1.33	*	46.2	130
032	Hope	150	1.19	*	40.8	368	19	23.9	0.80		27.5	69
033	Chilliwack	1,994	1.21	*	41.4	4,811	443	374.9	1.18	*	40.9	1,083
034	Abbotsford	2,867	1.01		34.6	8,290	616	611.0	1.01		34.9	1,765
035	Langley	2,492	1.12	*	38.5	6,475	534	509.9	1.05		36.3	1,473
037	Delta	1,413	0.92	*	31.6	4,477	256	288.4	0.89		30.7	833
038	Richmond	2,262	0.81	*	27.7	8,154	473	619.3	0.76	*	26.4	1,789
040	New Westminster	1,223	1.09	*	37.4	3,271	268	253.4	1.06		36.6	732
041	Burnaby	3,054	0.82	*	28.2	10,829	632	819.4	0.77	*	26.7	2,367
042	Maple Ridge	1,866	1.17	*	40.2	4,647	404	346.5	1.17	*	40.4	1,001
043	Coquitlam	3,737	1.06	*	36.4	10,280	812	785.5	1.03		35.8	2,269
044	North Vancouver	1,878	0.89	*	30.6	6,140	378	422.0	0.90	*	31.0	1,219
045	West Vancouver-Bowen Is.	395	0.81	*	27.9	1,417	76	87.9	0.86		29.9	254
046	Sunshine Coast	388	1.13	*	39.0	995	79	73.7	1.07		37.1	213
047	Powell River	269	1.17	*	40.1	670	50	50.5	0.99		34.2	146
048	Howe Sound	719	0.96		33.1	2,170	157	163.0	0.96		33.3	471
049	Bella Coola Valley	116	1.42	*	48.9	237	15	10.7	1.40		48.4	31
050	Queen Charlotte	111	1.28	*	43.9	253	13	12.8	1.01		35.1	37
051	Snow Country	11	1.10		37.9	29	1	1.0	0.96		33.3	3
052	Prince Rupert	329	1.12	*	38.4	856	75	62.3	1.20		41.7	180
053	Upper Skeena	158	1.43	*	49.2	321	33	27.0	1.22		42.3	78
054	Smithers	406	1.09		37.3	1,088	87	75.1	1.16		40.1	217
055	Burns Lake	159	1.06		36.3	438	30	34.3	0.88		30.3	99
056	Nechako	450	1.21	*	41.6	1,081	104	80.0	1.30	*	45.0	231
057	Prince George	2,301	1.23	*	42.4	5,431	478	392.2	1.22	*	42.2	1,133
059	Peace River South	629	1.19	*	40.8	1,543	147	116.3	1.26	*	43.8	336
060	Peace River North	822	0.86	*	29.6	2,776	215	213.2	1.01		34.9	616
061	Greater Victoria	3,130	1.02		35.1	8,908	683	637.3	1.07		37.1	1,841
062	Sooke	1,229	1.10	*	37.7	3,259	311	262.7	1.18	*	41.0	759
063	Saanich	722	1.07		36.9	1,959	147	133.3	1.10		38.2	385
064	Gulf Islands	146	0.98		33.8	432	32	28.4	1.13		39.0	82
065	Cowichan	1,016	1.13	*	38.8	2,620	197	188.0	1.05		36.3	543
066	Lake Cowichan	85	1.09		37.4	227	14	14.5	0.96		33.3	42
067	Ladysmith	293	1.14	*	39.1	749	57	48.5	1.18		40.7	140
068	Nanaimo	1,899	1.28	*	44.1	4,311	401	319.5	1.26	*	43.4	923
069	Qualicum	505	1.19	*	40.9	1,234	95	82.0	1.16		40.1	237
070	Alberni	665	1.20	*	41.2	1,616	146	123.2	1.18	*	41.0	356
071	Courtenay	885	1.07	*	36.9	2,400	188	171.0	1.10		38.1	494
072	Campbell River	781	1.23	*	42.4	1,843	164	143.0	1.15		39.7	413
075	Mission	834	1.08	*	37.0	2,254	168	157.2	1.07		37.0	454
076	Agassiz - Harrison	204	1.22	*	41.9	487	39	33.9	1.15		39.8	98
077	Summerland	123	1.01		34.6	355	32	26.7	1.20		41.6	77
078	Enderby	139	1.12		38.5	361	28	26.0	1.08		37.3	75
080	Kitimat	190	1.23	*	42.2	450	38	40.5	0.94		32.5	117
081	Fort Nelson	148	0.84	*	28.9	512	35	32.5	1.08		37.2	94
083	Central Coast	72	1.42	*	48.6	148	9	8.0	1.13		39.1	23
084	Vancouver Island West	57	1.38	*	47.5	120	9	8.3	1.08		37.5	24
085	Vancouver Island North	331	1.26	*	43.3	765	67	55.0	1.22		42.1	159
087	Stikine	12	1.40		48.0	25	4	3.5	1.16		40.0	10
088	Terrace	495	1.18	*	40.5	1,222	108	89.7	1.20		41.7	259
092	Nisga'a	79	1.43	*	49.1	161	15	13.8	1.08		37.5	40
094	Telegraph Creek	16	0.97		33.3	48	4	3.1	1.28		44.4	9
161	Vancouver - City Centre	1,404	0.92	*	31.6	4,438	353	367.3	0.96		33.3	1,061
162	Vancouver - Downtown E.side	773	0.97		33.5	2,308	205	192.5	1.07		36.9	556
163	Vancouver - North East	1,492	0.79	*	27.1	5,499	312	381.5	0.82	*	28.3	1,102
164	Vancouver - Westside	1,659	0.86	*	29.5	5,631	328	388.1	0.85	*	29.3	1,121
165	Vancouver - Midtown	1,542	0.88	*	30.4	5,070	304	364.2	0.83	*	28.9	1,052
166	Vancouver - South	1,793	0.79	*	27.2	6,584	348	450.4	0.77	*	26.7	1,301
201	Surrey	7,109	0.87	*	29.9	23,763	1,520	1,794.9	0.85	*	29.3	5,185
202	South Surrey/White Rock	956	1.03		35.5	2,691	170	183.5	0.93		32.1	530
	PROVINCIAL TOTAL	**72,248**	**1.00**		**34.4**	**210,153**	**15,546**	**15,546.0**	**1.00**		**34.6**	**44,908**

Note: *Statistical testing indicates that observed number of births with perinatal conditions is signficantly different from the expected ($p<0.05$, two tailed). Ratio-observed over the expected. Percent of births is based on total live births and includes residents with unknown LHA and excludes non-residents.

FIGURE 34

PERINATAL CONDITIONS IN LIVE BIRTHS BY LOCAL HEALTH AREA

BRITISH COLUMBIA, 2004–2008


QUINTILE (Ratio)
5 (>1.22)
4 (1.13-1.22)
3 (1.07-1.13)
3 (1.00-1.07)
1 (<1.00)
Statistically Significant
N
0 100 200 300 kms
see inset 1
Inset 2
0
see inset 2
Inset 1
0 50 kms

Note: Ratio - Observed over the expected. Refer to Figure 1 to clarify geographical location of LHAs.

Death-related Statistics

Vital Statistics Information Box

DEATHS BY DECEDENT'S COUNTRY OF BIRTH

BRITISH COLUMBIA, 2009

Area	Province/Country	Deaths
Canada	**Total**	**20,988**
	British Columbia	8,466
	Saskatchewan	3,826
	Alberta	2,908
	Ontario	2,164
	Manitoba	2,018
	Quebec	741
	Nova Scotia	376
	New Brunswick	243
	Newfoundland & Labrador	144
	Prince Edward Island	55
	Yukon	22
	Northwest Territories & Nunavut	14
	Unknown Province	11
North and Central America	**Total**	**787**
	United States	683
	Other North and Central American Countries	104
South America		**85**
Europe	**Total**	**6,309**
	England	1,935
	Other United Kingdom	839
	Germany	695
	Netherlands	411
	Italy	346
	Scandinavian Countries	344
	Poland	288
	Hungary	182
	Ireland	145
	Russia	145
	Other European Countries	979
Asia and the Middle East	**Total**	**2,508**
	China	1,019
	India	598
	Philippines	191
	Hong Kong	155
	Vietnam	91
	Pakistan	78
	Korea	68
	Iran	55
	Japan	47
	Other Asian and the Middle Eastern Countries	206
Africa	**Total**	**199**
	South Africa	57
	Other African Countries	142
Oceania	**Total**	**195**
	Fiji	113
	Australia	48
	New Zealand	32
	Other Oceanic Countries	2
Unknown	**Total**	**156**
Total		**31,227**

Note: Non-residents are excluded.

Death Introduction

In recognition of the importance of mortality statistics for health surveillance, planning, and research, a comprehensive array of tables is presented in this part of the report. Causes of death and/or age at death form the base of most tables because they are crucial components of health status for regional, national, and international comparisons. While other causes may have contributed to the death, the Underlying Cause of Death (UCOD) (see Glossary) is defined as the condition or injury that initiated the train of events leading directly to the death, and was used for these tabulations. All causes are identified according to the World Health Organization's International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10) which is a statistical coding system and the accepted international standard for mortality coding. The groups of codes used to define particular topics are noted in the tables.

Deaths – General Indicators

An overall view of the number of deaths by ICD-10 chapters by age group and gender is shown in Table 21. It provides a summary of the contribution of the 19 diagnostic categories to total deaths in BC in 2009. More detailed information for the same age groups appears in Appendix 2, which provides counts at the "3 character level". Although the causes shown in Appendix 2 ("Detailed Cause of Death by Gender and Age") are fairly specific, most ICD-10 codes consist of four or five characters, and are therefore even more detailed than the "roll ups" shown in Appendix 2. Neoplasms and diseases of the circulatory system accounted for most of the deaths in 2009 for both genders. Deaths in those two categories are further analysed in the following sections.

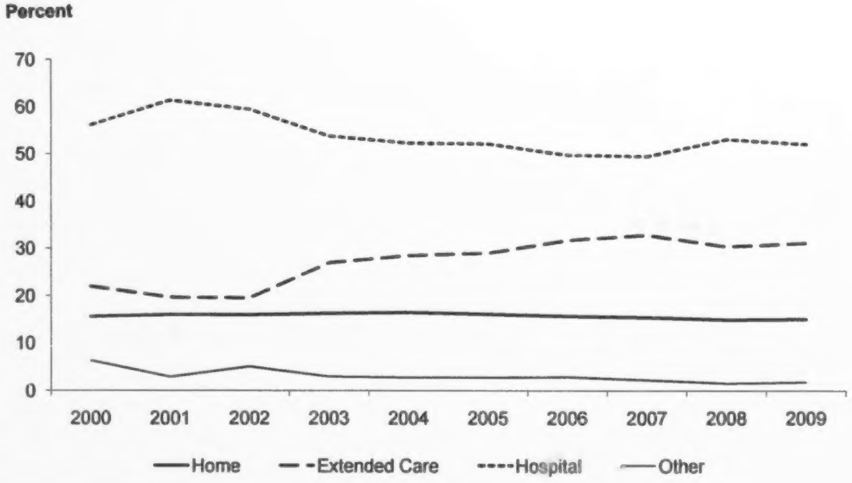
Vital Statistics Information Box

PLACE OF DEATH FOR DEATHS FROM NATURAL CAUSES
BRITISH COLUMBIA, 2000 - 2009

Deaths from natural causes in 2000 to 2009 were examined to determine the place of death. The majority of these deaths to British Columbia residents occurred in hospital (53.8 % over the ten year period). 15.7 percent of deaths from natural causes occurred at home and 27.4 percent occurred in extended care facilities.

Place of Death	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2000-2009
Home	3,967	4,227	4,268	4,438	4,571	4,532	4,499	4,524	4,496	4,440	43,962
Extended Care	5,586	5,189	5,213	7,343	7,916	8,139	9,091	9,607	9,138	9,195	76,417
Hospital	14,303	16,179	15,876	14,641	14,525	14,639	14,268	14,484	15,945	15,356	150,216
Other and Unknown	1,612	775	1,353	813	776	788	826	671	476	536	8,626
Total	**25,468**	**26,370**	**26,710**	**27,235**	**27,788**	**28,098**	**28,684**	**29,286**	**30,055**	**29,527**	**279,221**

PERCENT OF DEATHS FROM NATURAL CAUSES BY PLACE OF DEATH
BRITISH COLUMBIA, 2000 - 2009



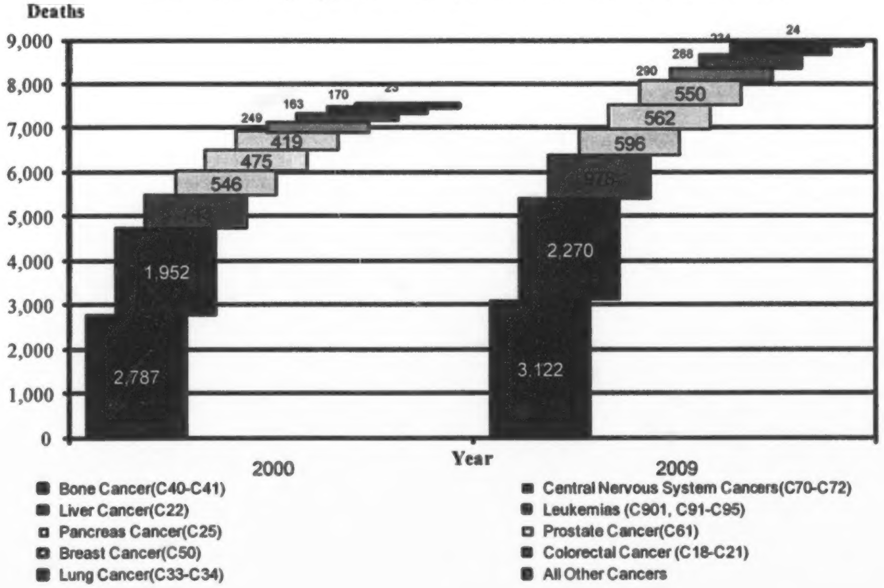
Note: The BC Vital Statistics Agency changed the way the place of death is recorded in 2008.

Vital Statistics Information Box

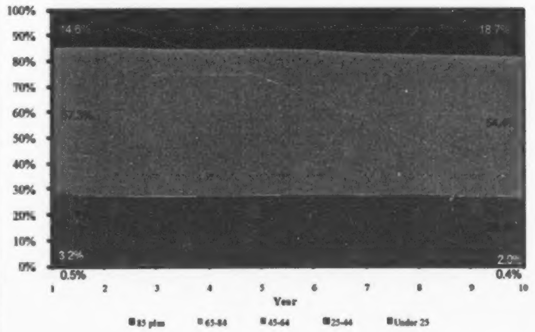
CANCER DEATHS IN BRITISH COLUMBIA, 2000 TO 2009

More British Columbians succumbed to Cancer or Malignant Neoplasms (ICD Codes C00-C97) than any other cause in 2009. The following charts illustrate the trends and changes in deaths caused by Cancer from 2000 to 2009. As illustrated, the proportion of deaths caused by specific types of Cancer has not changed substantially from 2000 to 2009. However, those dying of Cancer in 2009 are older than they were in 2000, and larger shares of them are female. Both the Age Standardized Mortalilty Rate (ASMR) rate and Potential Years of Life Lost (PYLLSR) have fallen.

Cancer Deaths, by Type of Cancer, British Columbia, 2000 and 2009



Share of Cancer Deaths by Age Group 2000-2009



ASMR and PYLLSR, Cancer Deaths, British Columbia 2000 to 2009

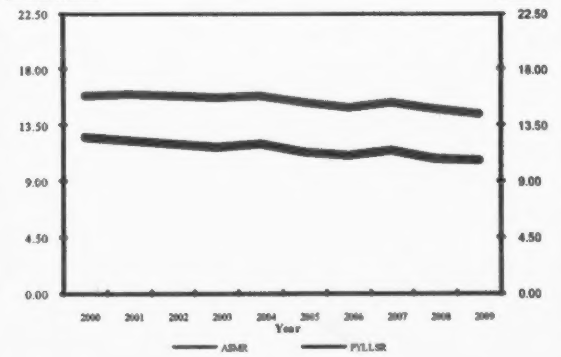


TABLE 21

CAUSES OF DEATH BY GENDER AND AGE

BRITISH COLUMBIA, 2009

ICD-10 Code(s)	Causes of Death	Gender	Age Group (in Years)										Total		
			<1	1–4	5–9	10–14	15–19	20–24	25–44	45–64	65–79	80+	Number	Percent	ASMR
A00-B99	Certain infectious and parasitic diseases	M	2	-	1	-	-	-	22	117	71	107	320	2.0	1.12
		F	1	1	-	-	1	1	8	45	49	143	249	1.6	0.66
		T	3	1	1	-	1	1	30	162	120	250	569	1.8	0.87
C00-D48	Neoplasms	M	-	1	5	1	7	4	78	1,142	2,052	1,574	4,864	30.4	17.32
		F	1	4	1	1	4	8	107	1,050	1,530	1,535	4,241	27.8	12.62
		T	1	5	6	2	11	12	185	2,192	3,582	3,109	9.105	29.2	14.68
D50-D89	Diseases of blood and blood-forming organs,certain immune mechanisms	M	1	-	-	-	-	-	6	13	7	30	57	0.4	0.20
		F	1	-	-	1	-	1	3	7	16	27	56	0.4	0.16
		T	2	-	-	1	-	1	9	20	23	57	113	0.4	0.18
E00-E90	Endocrine/nutritional/metabolic diseases	M	1	2	1	1	1	1	16	122	229	261	635	4.0	2.26
		F	-	1	-	1	-	3	14	63	125	368	575	3.8	1.49
		T	1	3	1	2	1	4	30	185	354	629	1,210	3.9	1.85
F00-F99	Mental and behavioural disorders	M	-	-	-	-	-	-	5	60	80	323	468	2.9	1.59
		F	-	-	-	-	-	-	7	27	73	625	732	4.8	1.54
		T	-	-	-	-	-	-	12	87	153	948	1,200	3.8	1.58
G00-G99	Diseases of the nervous system	M	1	-	1	-	-	2	20	67	169	316	576	3.6	2.04
		F	-	2	-	1	1	3	13	70	137	508	735	4.8	1.79
		T	1	2	1	1	1	5	33	137	306	824	1,311	4.2	1.92
H00-H59	Diseases of the eye and adnexa	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	1	-	1	0.0	+
		T	-	-	-	-	-	-	-	-	1	-	1	0.0	+
H60-H95	Diseases of the ear and mastoid process	M	-	-	-	-	-	-	-	-	-	1	1	0.0	+
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	1	1	0.0	+
I00-I99	Diseases of the circulatory system	M	-	-	1	-	4	2	74	661	1,329	2,481	4,552	28.5	15.82
		F	-	1	-	1	-	-	29	221	752	3,734	4,738	31.1	10.71
		T	-	1	1	1	4	2	103	882	2,081	6,215	9,290	29.7	13.12
J00-J99	Diseases of the respiratory system	M	2	-	3	-	3	2	18	161	492	997	1,678	10.5	5.85
		F	1	3	-	-	-	-	16	146	366	1,188	1,720	11.3	4.19
		T	3	3	3	-	3	2	34	307	858	2,185	3,398	10.9	4.88
K00-K93	Diseases of the digestive system	M	-	-	-	-	-	1	23	195	184	241	644	4.0	2.23
		F	-	-	-	-	-	-	12	121	163	363	659	4.3	1.73
		T	-	-	-	-	-	1	35	316	347	604	1,303	4.2	1.97
L00-L99	Diseases of the skin and subcutaneous tissue	M	-	-	-	-	-	-	1	1	7	14	23	0.1	0.08
		F	-	-	-	-	-	1	-	4	9	27	41	0.3	0.11
		T	-	-	-	-	-	1	1	5	16	41	64	0.2	0.09
M00-M99	Diseases of the musculoskeletal system and connective tissue	M	-	-	-	-	1	-	2	15	14	25	57	0.4	0.20
		F	-	-	-	-	1	-	2	23	32	68	126	0.8	0.34
		T	-	-	-	-	2	-	4	38	46	93	183	0.6	0.28
N00-N99	Diseases of the genitourinary system	M	-	-	-	-	-	1	3	19	74	243	340	2.1	1.17
		F	-	-	-	-	-	-	2	15	83	282	382	2.5	0.89
		T	-	-	-	-	-	1	5	34	157	525	722	2.3	1.00
O00-O99	Complications of pregnancy, childbirth and the puerperium	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	1	-	1	-	-	-	2	0.0	+
		T	-	-	-	-	1	-	1	-	-	-	2	0.0	+
P00-P96	Certain conditions originating in the perinatal period	M	38	-	-	-	-	-	-	-	-	-	38	0.2	0.24
		F	47	-	-	1	-	-	-	1	-	-	49	0.3	0.33
		T	85	-	-	1	-	-	-	1	-	-	87	0.3	0.28
Q00-Q99	Congenital anomalies	M	9	1	1	-	-	3	8	10	7	4	43	0.3	0.20
		F	15	1	-	-	1	2	3	9	2	2	35	0.2	0.18
		T	24	2	1	-	1	5	11	19	9	6	78	0.2	0.19
R00-R99	Symptoms, signs and ill-defined conditions, unknown causes	M	15	4	2	2	15	29	128	206	81	72	554	3.5	2.23
		F	13	2	-	3	4	11	55	100	43	105	336	2.2	1.15
		T	28	6	2	5	19	40	183	306	124	177	890	2.9	1.69
V01-Y98	External causes	M	1	1	2	7	46	68	311	386	147	172	1,141	7.1	4.65
		F	2	1	1	1	7	22	114	121	84	206	559	3.7	1.86
		T	3	2	3	8	53	90	425	507	231	378	1,700	5.4	3.23
	All causes	M	70	9	17	11	77	113	715	3,175	4,943	6,861	15,991	100.0	57.20
		F	81	16	2	10	20	52	386	2,023	3,465	9,181	15,236	100.0	39.76
	PROVINCIAL TOTAL	T	151	25	19	21	97	165	1,101	5,198	8,408	16,042	31,227	100.0	47.82

Note: ASMR per 10,000 standard population (Canada 1991 Census). Total percentage may not add up to 100 due to rounding. + Denotes the number of cases is less than five. Non-residents are excluded. Total includes unknown gender. The output from ICD-10 mortality coding and underlying cause of death selection was modified in BC to reflect the intent of certifiers in this jurisdiction and to provide greater continuity over time. Data using the standard ICD-10 rules for such categories as pneumonia/influenza, diabetes, or cancer should not be compared to the numbers shown above.

Leading Causes of Death

Table 22 shows the 12 leading causes of death in BC. The two leftmost columns list the cause and the corresponding codes in ICD-10. For 2004-2008 period and the year 2009, the following four values are shown: number of deaths, the rank by number of deaths, the ASMR, and the rank by ASMR. The rows of the table are in the order of the 2009 ASMR rank.

For 2009, the 12 leading causes of death shown in Table 22 were responsible for 85.1 percent of all deaths. The top three causes of death were the same for both time periods, not only in the rank by number of deaths, but also in ASMR rank. They are malignant neoplasms, cardiovascular disease and, cerebrovascular diseases. For 2009, these three leading causes account for 57.0 percent of all deaths.

Figure 35 shows the number of deaths from Table 22 in 2009 graphically. It shows clearly the impact of the top three categories, which cause more than half of all deaths.

Table 23 shows the five leading causes of death in the seven different age groupings. The leading cause of death among those under 1 year of age (infant mortality), were certain conditions originating in the perinatal period with 56.3 percent of the deaths attributable to this cause. The second highest cause of infant deaths was congenital malformations and chromosome abnormalities. Males accounted for 46.4 percent of the deaths among those under 1 year of age. Deaths occurred in the first seven days after birth accounted for 59.6 percent of all infant deaths and 68.2 percent occurred within the first 28 days after birth (see Table 27). Infant mortality is examined in more detail in the next section.

Among children 1 to 14 years old, unintentional injuries were the most common cause of deaths for both genders combined; however, most of these were males. Malignant neoplasms and metabolic disorders claimed slightly more male than female lives. Other disorders of the nervous system claimed more females than males, whereas pneumonia/influenza claimed equal numbers of males and females.

By contrast, unintentional injuries were the leading cause of death, particularly for males, in the age groups 15-24 and 25-44. These causes include events such as Motor vehicle accidents, Falls, and Accidental poisonings. A more detailed list of the included causes by ICD codes appears in Appendix 2. Counts of death due to unintentional injuries, suicide, and homicide, (collectively referred to as "external causes of death") in the current year tend to underestimate the actual figures due to known delays in determining final causes of deaths. As a result, it can be anticipated that these numbers will be revised upwards in subsequent annual reports.

Between 15 and 24 years of age, suicide ranked second as the leading cause of death after unintentional injuries (see also Table 35). There were substantially fewer female deaths in this age group as shown in Table 23. In the age group between 25 and 44, malignant neoplasms were the second most common cause of death with female deaths outnumbering males and comprising the largest proportion of female mortality in this age group.

Malignant neoplasms were the leading cause of death for those between 45 and 64 years, accounting for 35.8 percent of deaths for males and 51.6 percent of deaths for females in this age group.

Between 65 and 84 years of age, 36.3 percent of the deaths were due to malignant neoplasms, followed by cardiovascular disease, which caused 19.8 percent of deaths. For those 85 years and older, the order of those two cause categories was reversed with cardiovascular disease causing 28.5 percent of deaths and malignant neoplasms causing 15.0 percent.

Malignant neoplasms were ranked in the first three leading causes of death in each age group for those over 1 year of age and was the overall leading cause of death in BC in 2004-2008, as well as in 2009 (see Table 22 and Figure 35). Notwithstanding, the ASMR for total malignant neoplasms and for lung cancer have declined over the last two decades (see Figures 19 and 20).

TABLE 22

TWELVE LEADING CAUSES OF DEATH

BRITISH COLUMBIA, 2004–2008 AND 2009

Cause of Death	ICD-10 Code(s)	2004–2008				2009			
		Number	Rank	ASMR	Rank	Number	Rank	ASMR	Rank
Malignant neoplasms	C00-C97	42,961	1	15.22	1	8,914	1	14.39	1
Cardiovascular disease	I00-I51	34,093	2	10.87	2	6,586	2	9.34	2
Cerebrovascular diseases	I60-I69	11,475	3	3.59	3	2,299	3	3.17	3
Chronic Pulmonary Disease	J40-J44	6,636	4	2.20	5	1,413	4	2.10	4
Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	6,607	5	2.69	4	1,149	6	2.06	5
Pneumonia/Influenza	J09-J181, J188, J189	6,579	6	2.00	6	1,292	5	1.77	6
Diabetes mellitus	E10-E14	5,060	7	1.72	7	962	8	1.46	7
Vascular/senile dementia	F01, F03	3,952	9	1.15	9	1,028	7	1.31	8
Other diseases of digestive system	K00-K67, K80-K93	4,172	8	1.35	8	903	9	1.31	9
Other disorders of the nervous system	G00-G25, G31-G99	3,179	11	1.12	10	635	12	1.02	10
Other diseases of the respiratory system	J00-J06, J182, J20-J39, J45-J98	3,164	12	1.03	12	693	11	1.02	11
Urinary system diseases	N00-N39, N990, N991, N995	3,433	10	1.07	11	699	10	0.97	12
Other causes[1]		22,074		8.13		4,654		7.91	
TOTAL (All causes of death)		**153,385**		**52.14**		**31,227**		**47.82**	

Note: [1] Other causes includes undetermined and pending.
ASMR – per 10,000 standard population (Canada 1991 Census).
The ASMR in the current year determined the order in which the causes of death are presented.
Leading causes are ranked according to 2009 ASMR.
Non-residents are excluded. The output from ICD-10 mortality coding and underlying cause of death selection was modified in BC to reflect the intent of certifiers in this jurisdiction and to provide greater continuity over time.
Data using the standard ICD-10 rules for such categories as pneumonia/influenza, diabetes, or cancer should not be compared to the numbers shown above.

FIGURE 35

TWELVE LEADING CAUSES OF DEATH

British Columbia, 2009

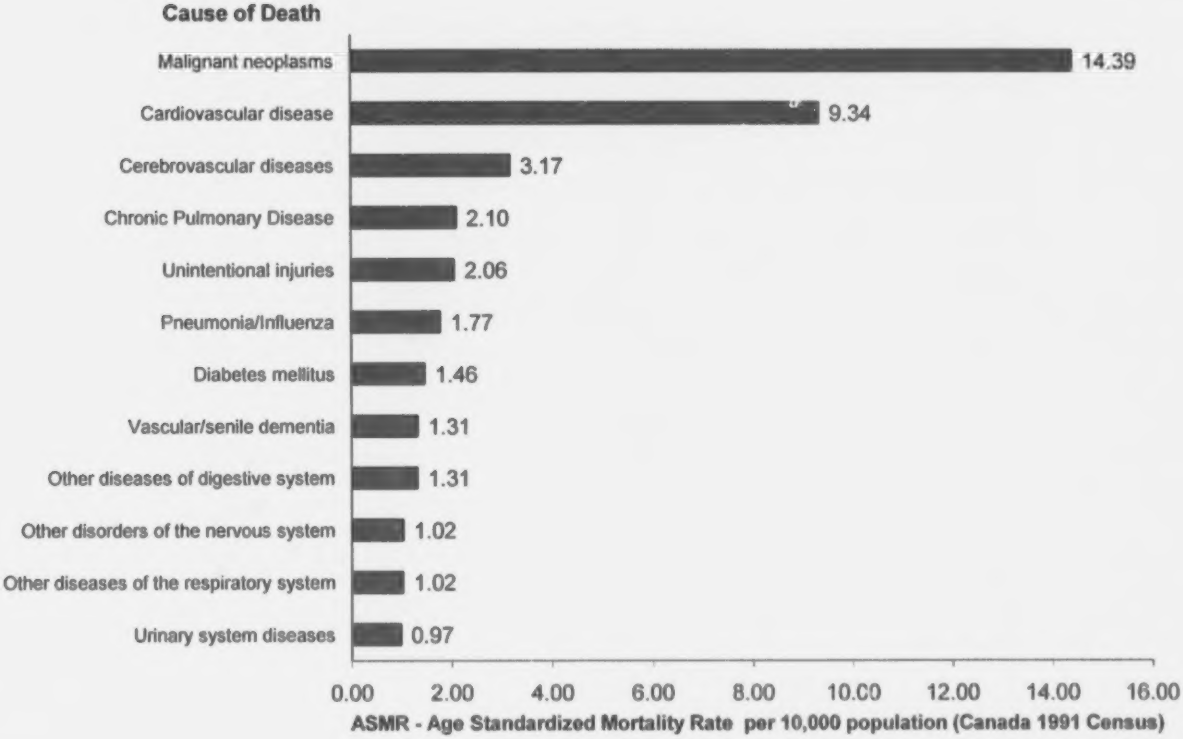


TABLE 23

LEADING CAUSES OF DEATH BY AGE AND GENDER

BRITISH COLUMBIA, 2009

Cause of Death	ICD-10 Code(s)	Male		Female		Total	
		Number	Percent	Number	Percent	Number	Percent
Under 1 Year Old							
1. Certain conditions originating in the perinatal period	P00-P96	38	54.3	47	58.0	85	56.3
2. Congenital malformations and chromosome abnormalities	Q00-Q99	9	12.9	15	18.5	24	15.9
3. Sudden infant death syndrome (SIDS)[2]	R95	6	8.6	4	4.9	10	6.6
4. Certain infectious and parasitic diseases	A00-B99	2	2.9	1	1.2	3	2.0
5. Pneumonia/Influenza	J09-J181, J188, J189	2	2.9	-	-	2	13
Other causes[1]		13	18.6	14	17.3	27	17.9
All causes		**70**	**100.0**	**81**	**100.0**	**151**	**100.0**
1-14 Years Old							
1. Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	10	27.0	3	10.7	13	20.0
2. Malignant neoplasms	C00-C97	7	18.9	5	17.9	12	18.5
3. Metabolic disorders	E70-E89	4	10.8	1	3.6	5	7.7
4. Other disorders of the nervous system	G00-G25, G31-G99	1	2.7	3	10.7	4	6.2
5. Pneumonia/Influenza	J09-J181 J188, J189	2	5.4	2	7.1	4	6.2
Other causes[1]		13	35.1	14	50.0	27	41.5
All causes		**37**	**100.0**	**28**	**100.0**	**65**	**100.0**
15-24 Years Old							
1. Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	61	32.1	21	29.2	82	31.3
2. Suicide	X60-X84, Y870	35	18.4	6	8.3	41	15.6
3. Malignant neoplasms	C00-C97	11	5.8	11	15.3	22	8.4
4. Homicide	X85-Y09, Y871	16	8.4	2	2.9	18	6.9
5. Other disorders of the nervous system	G00-G25, G31-G99	2	1.1	4	5.6	6	2.3
Other causes[1]		65	34.2	28	38.9	93	35.5
All causes		**190**	**100.0**	**72**	**100.0**	**262**	**100.0**
25-44 Years Old							
1. Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	152	21.3	61	15.8	213	19.3
2. Malignant neoplasms	C00-C97	77	10.8	105	27.2	182	16.5
3. Suicide	X60-X84, Y870	126	17.6	41	10.6	167	15.2
4. Cardiovascular disease	I00-I51	55	7.7	21	5.4	76	6.9
5. Homicide	X85-Y09,Y871	27	3.8	8	2.1	35	3.2
Other causes[1]		278	38.9	150	38.9	428	38.9
All causes		**715**	**100.0**	**386**	**100.0**	**1,101**	**100.0**

(concluded on next page)

Note: Order of leading causes based on total deaths in the specified age group.

[1] Other causes includes undetermined and pending. Total percentage may not add up to 100 due to rounding. Non-residents are excluded. The output from ICD-10 mortality coding and underlying cause of death selection was modified in BC to reflect the intent of certifiers in this jurisdiction and to provide greater continuity over time. Data using the standard ICD-10 rules for such categories as pneumonia/influenza, diabetes, or cancer should not be compared to the numbers shown above.

[2] The BC Coroners' Service classifies SIDS deaths as "SUDI" - please see glossary (under "SIDS") for explanation.

TABLE 23 – *concluded*

LEADING CAUSES OF DEATH BY AGE AND GENDER

BRITISH COLUMBIA, 2009

Cause of Death	ICD-10 Code(s)	Male		Female		Total	
		Number	Percent	Number	Percent	Number	Percent
45-64 Years Old							
1. Malignant neoplasms	C00-C97	1,136	35.8	1,043	51.6	2,179	41.9
2. Cardiovascular disease	I00-I51	544	17.1	149	7.4	693	13.3
3. Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	232	7.3	77	3.8	309	5.9
4. Diseases of liver	K70-K76	127	4.0	73	3.6	200	3.8
5. Suicide	X60-84, Y870	141	4.4	34	1.7	175	3.4
Other causes[1]		995	31.3	647	32.0	1,642	31.6
All causes		**3,175**	**100.0**	**2,023**	**100.0**	**5,198**	**100.0**
65-84 Years Old							
1. Malignant neoplasms	C00-C97	2,717	36.4	2,130	36.2	4,847	36.3
2. Cardiovascular disease	I00-I51	1,580	21.2	1,068	18.2	2,648	19.8
3. Cerebrovascular diseases	I60-I69	451	6.0	436	7.4	887	6.6
4. Chronic Pulmonary Disease	J40-J44	399	5.3	365	6.2	764	5.7
5. Diabetes mellitus	E10-E14	295	4.0	207	3.5	502	3.8
Other causes[1]		2,022	27.1	1,674	28.5	3,696	27.7
All causes		**7,464**	**100.0**	**5,880**	**100.0**	**13,344**	**100.0**
85 Years and Older							
1. Cardiovascular disease	I00-I51	1,185	27.3	1,976	29.2	3,161	28.5
2. Malignant neoplasms	C00-C97	819	18.9	852	12.6	1,671	15.0
3. Cerebrovascular diseases	I60-I69	410	9.4	836	12.4	1,246	11.2
4. Pneumonia/Influenza	J09-J181, J188, J189	293	6.8	450	6.7	743	6.7
5. Vascular/senile dementia	F01, F03	218	5.0	509	7.5	727	6.5
Other causes[1]		1,415	32.6	2,143	31.7	3,558	32.0
All causes		**4,340**	**100.0**	**6,766**	**100.0**	**11,106**	**100.0**

Notes for this table are on previous page.

Infant Mortality

BC had lower infant mortality rates than Canada as a whole from 1992 until 2007: the most recent year for which information on Canadian infant mortality rates is available (see Table 5). There were 151 infant deaths in BC in 2009 or 3.36 deaths per 1,000 live births. The rate 20 years ago was over 8 per 1,000 live births and that has progressively declined to the rates seen in the last few years.

Table 24 shows the number of infants who died in 2009 by birth weight and maternal age group. The first column has the mother's age group ranging from less than 20 years to 40 years or older. The infants' birth weights are grouped across the top of the table. Across the bottom and down the right side, the table shows row and column totals, percents, and rates per 1,000 live births. The difference in infant mortality rates across the 3 birth weight categories is quite distinct: For infants with birth weights of 2,500 grams or more, 1.16 per 1,000 live births in the same birth weight category died in their first year. In the 1,500-2,499 gram group the rate was 9.06 per 1,000 live births, and infants who weigh less than 1,500 grams had an infant mortality rate of 193.95 per 1,000 live births.

In the past decade there has been no significantly increasing or decreasing trend in the infant mortality rate.

Table 25 repeats the birth weight categories and general format shown in Table 24 but replaces maternal age groups with gestational age. Of the 151 infant deaths in 2009, there were 39 term births (37 to 41 weeks) with birth weights of 2,500 grams or more.

As expected, infant mortality tended to increase as birth weight and gestational age decrease. Of the infant deaths in the period, 46.4 percent were extremely premature (less than 28 weeks) with low birth weight (less than 2,500 grams), 63.6 percent were low birth weight, 67.5 percent were premature (less than 37 weeks) and 59.6 percent were both low birth weight and premature.

Table 26 shows infant mortality in each LHA of the infants' usual residence, for 2004-2008 and for the year 2009. The left two columns show the LHA number and name. The three columns for 2004-2008 show the number of infant deaths in the LHA (Observed Deaths), the ratio, and the rate of infant deaths per 1,000 live births. In this period, there were only 6 LHAs with statistically significant ratios (4 high and 2 low). For 2009, the table indicates the number of deaths in three age ranges: early neonatal (0 to 6 days), neonatal (0 to 27 days), and post-neonatal (28 to 364 days). The last two columns indicate the total number of infant deaths, and the infant death rate per 1,000 live births.

Causes of infant deaths and stillbirths are shown in Table 27. There were 151 infant deaths and 429 stillbirths in 2009. More than half (59.6 percent) of infant deaths in 2009 occurred in the early neonatal period, of those, 96.7 percent were due to congenital anomalies or perinatal conditions. In 2009, perinatal conditions were the cause of 56.3 percent of infant deaths and 97.7 percent of stillbirths.

TABLE 24

INFANT MORTALITY BY AGE OF MOTHER AND BIRTH WEIGHT

BRITISH COLUMBIA, 2009

Age of Mother	Birth Weight (in Grams)				Total		
	<1500	1500–2499	2500+	N.S.	Number	Percent	Rate
<20	5	2	4	-	11	7.3	7.70
20-24	14	1	7	-	22	14.6	3.55
25-29	19	8	17	1	45	29.8	3.55
30-34	24	2	13	2	41	27.2	2.84
35-39	7	4	5	-	16	10.6	1.92
40+	8	2	3	-	13	8.6	6.98
N.S.	-	-	-	3	3	2.0	
TOTAL	**77**	**19**	**49**	**6**	**151**	**100.0**	**3.36**
Percent	**51.0**	**12.6**	**32.5**	**4.0**	**100.0**		
Rate	**193.95**	**9.06**	**1.16**		**3.36**		

Note: Infant Mortality – Age at death less than one year.
Rate per 1,000 live births in the specified age or birth weight group.
+Denotes the number of cases is less than five.
Total percentage may not add up to 100 due to rounding.
Non-residents are excluded.
N.S. - Not stated.

TABLE 25

INFANT MORTALITY BY GESTATIONAL AGE AND BIRTH WEIGHT

BRITISH COLUMBIA, 2009

Gestational Age (In Weeks)	Birth Weight (in Grams)				Total		
	<1500	1500–2499	2500+	N.S.	Number	Percent	Rate
<20	3	-	-	-	3	2.0	+
20-27	67	-	-	1	68	45.0	397.66
28-36	7	13	10	1	31	20.5	9.79
37-41	-	6	39	1	46	30.5	1.12
42+	-	-	-	-	-	-	-
N.S.	-	-	-	3	3	2.0	
TOTAL	**77**	**19**	**49**	**6**	**151**	**100.0**	**3.36**
Percent	**51.0**	**12.6**	**32.5**	**4.0**	**100.0**		
Rate	**193.95**	**9.06**	**1.16**		**3.36**		

Note: Infant Mortality – Age at death less than one year.
Rate per 1,000 live births in the gestational age or birth weight group.
+ Denotes the number of cases is less than five.
Total percentage may not add up to 100 due to rounding.
Non-residents are excluded.
N.S. – Not stated.

Table 26

INFANT MORTALITY BY LOCAL HEALTH AREA, British Columbia, 2004–2008 and 2009

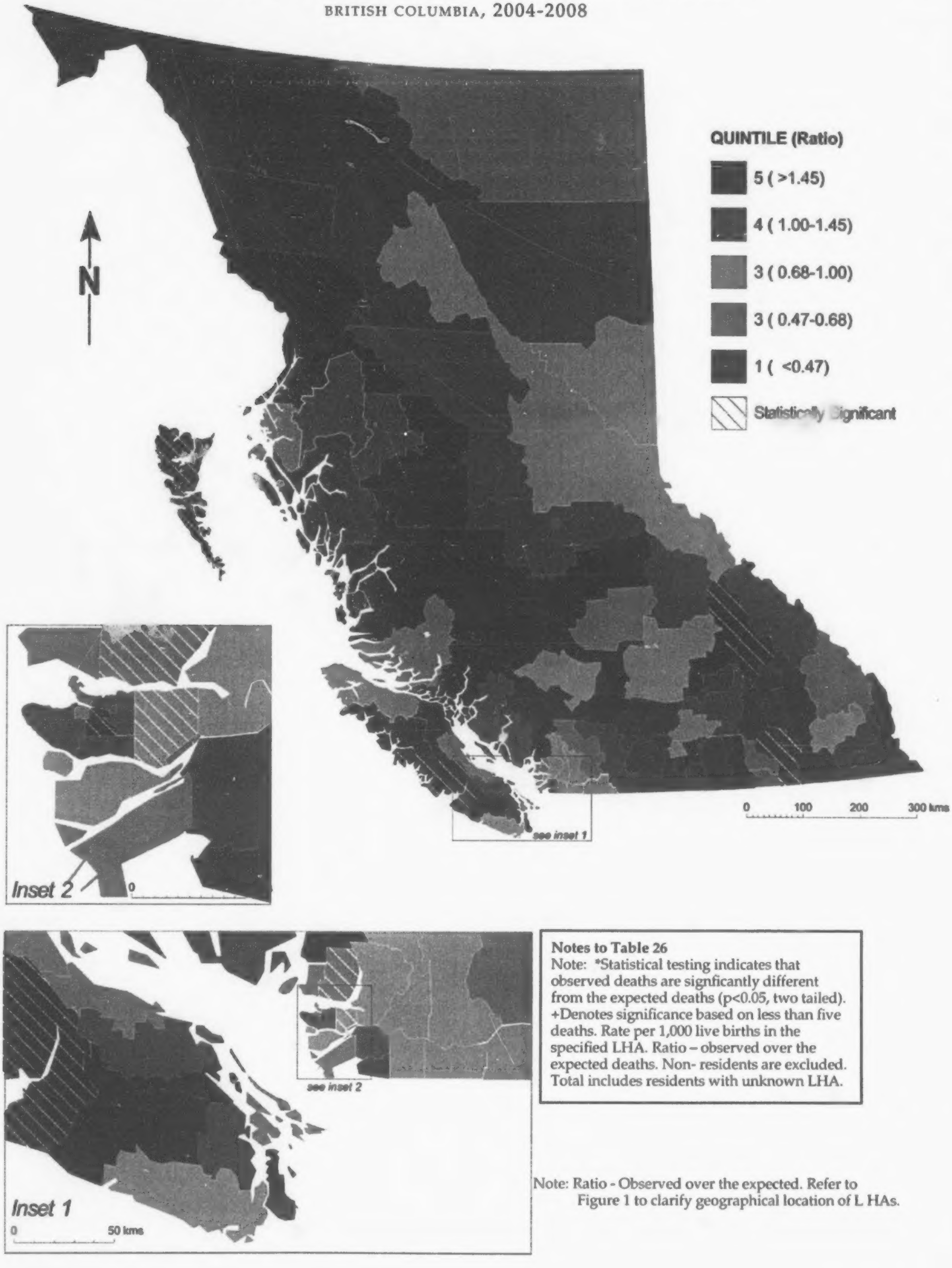
		2004–2008				2009				
						Age at Death (in Days)			Total	
Local Health Area		Observed Deaths	Ratio	(p)	Rate	0–6	0–27	28–364	Number	Rate
001	Fernie	3	1.11		4.48	1	1	-	1	6.02
002	Cranbrook	5	1.05		4.26	-	-	-	-	-
003	Kimberley	1	0.72		2.91	1	1	-	1	12.05
004	Windermere	1	0.61		2.46	1	1	-	1	9.90
005	Creston	-	-		-	-	-	1	1	7.41
006	Kootenay Lake	-	-		-	-	-	-	-	-
007	Nelson	-	-	*	-	1	1	-	1	4.07
009	Castlegar	1	0.55		2.21	-	-	-	-	-
010	Arrow Lakes	-	-		-	-	-	-	-	-
011	Trail	2	0.65		2.64	-	-	-	-	-
012	Grand Forks	4	2.97		12.01	-	-	-	-	-
013	Kettle Valley	-	-		-	-	-	-	-	-
014	Southern Okanagan	1	0.38		1.56	-	-	-	-	-
015	Penticton	10	1.58		6.37	-	-	-	-	-
016	Keremeos	-	-		-	-	-	-	-	-
017	Princeton	-	-		-	-	-	-	-	-
018	Golden	2	1.43		5.78	-	-	-	-	-
019	Revelstoke	5	3.32	*	13.44	-	-	-	-	-
020	Salmon Arm	9	1.76		7.11	-	-	-	-	-
021	Armstrong - Spallumcheen	-	-		-	1	1	-	1	13.16
022	Vernon	15	1.40		5.66	2	3	1	4	6.16
023	Central Okanagan	29	0.97		3.92	2	2	-	2	1.18
024	Kamloops	17	0.88		3.55	2	2	1	3	2.74
025	100 Mile House	1	0.49		1.97	1	1	-	1	9.09
026	North Thompson	1	1.08		4.39	-	-	-	-	-
027	Cariboo - Chilcotin	11	1.89		7.63	1	1	-	1	3.55
028	Quesnel	6	1.22		4.93	-	-	1	1	3.88
029	Lillooet	1	0.99		3.98	-	-	-	-	-
030	South Cariboo	3	2.49		10.07	-	-	-	-	-
031	Merritt	-	-		-	1	1	-	1	7.69
032	Hope	2	1.34		5.43	-	-	1	1	14.49
033	Chilliwack	16	0.82		3.33	-	2	-	2	1.85
034	Abbotsford	32	0.95		3.86	3	3	2	5	2.83
035	Langley	21	0.80		3.24	2	2	1	3	2.04
037	Delta	12	0.66		2.68	-	-	-	-	-
038	Richmond	27	0.82		3.31	2	2	1	3	1.68
040	New Westminster	8	0.60		2.45	2	2	-	2	2.73
041	Burnaby	30	0.68	*	2.77	6	7	2	9	3.80
042	Maple Ridge	13	0.69		2.80	1	1	-	1	1.00
043	Coquitlam	36	0.87		3.50	3	3	1	4	1.76
044	North Vancouver	14	0.56	*	2.28	3	3	-	3	2.46
045	West Vancouver-Bowen Is.	3	0.52		2.12	-	-	-	-	-
046	Sunshine Coast	5	1.24		5.03	1	2	-	2	9.39
047	Powell River	3	1.11		4.49	-	-	-	-	-
048	Howe Sound	13	1.48		5.99	1	1	1	2	4.25
049	Bella Coola Valley	3	3.13		12.66	-	-	-	-	-
050	Queen Charlotte	4	3.91	*	15.81	-	-	-	-	-
051	Snow Country	1	8.53		34.48	-	-	-	-	-
052	Prince Rupert	2	0.58		2.34	2	2	-	2	11.11
053	Upper Skeena	2	1.54		6.23	-	-	-	-	-
054	Smithers	6	1.36		5.51	-	-	-	-	-
055	Burns Lake	3	1.69		6.85	-	-	-	-	-
056	Nechako	6	1.37		5.55	2	2	1	3	12.99
057	Prince George	18	0.82		3.31	2	2	3	5	4.41
059	Peace River South	8	0.96		3.89	2	4	-	4	11.90
060	Peace River North	13	1.16		4.68	1	1	-	1	1.62
061	Greater Victoria	42	1.17		4.71	1	1	2	3	1.63
062	Sooke	12	0.91		3.68	1	1	1	2	2.64
063	Saanich	14	1.77		7.15	-	-	-	-	-
064	Gulf Islands	1	0.57		2.31	-	-	2	2	24.39
065	Cowichan	14	1.32		5.34	1	2	2	4	7.37
066	Lake Cowichan	2	2.18		8.81	-	-	1	1	23.81
067	Ladysmith	6	1.98		8.01	-	-	-	-	-
068	Nanaimo	19	1.09		4.41	3	3	4	7	7.58
069	Qualicum	3	0.60		2.43	2	2	-	2	8.44
070	Alberni	18	2.75	*	11.14	-	1	-	1	2.81
071	Courtenay	6	0.62		2.50	1	3	3	6	12.15
072	Campbell River	11	1.48		5.97	1	1	-	1	2.42
075	Mission	8	0.88		3.55	1	2	1	3	6.61
076	Agassiz - Harrison	1	0.51		2.05	-	-	-	-	-
077	Summerland	1	0.70		2.82	-	-	-	-	-
078	Enderby	-	-		-	-	-	-	-	-
080	Kitimat	-	-		-	-	-	-	-	-
081	Fort Nelson	1	0.48		1.95	-	-	-	-	-
083	Central Coast	2	3.34		13.51	-	-	-	-	-
084	Vancouver Island West	1	2.06		8.33	-	-	-	-	-
085	Vancouver Island North	2	0.65		2.61	1	1	-	1	6.29
087	Stikine	-	-		-	-	-	-	-	-
088	Terrace	5	1.01		4.09	1	1	-	1	3.86
092	Nisga'a	1	1.54		6.21	-	-	-	-	-
094	Telegraph Creek	-	-		-	-	-	-	-	-
161	Vancouver - City Centre	12	0.67		2.70	-	-	4	4	3.77
162	Vancouver - Downtown E.side	10	1.07		4.33	1	1	-	1	1.80
163	Vancouver - North East	26	1.17		4.73	-	-	2	2	1.81
164	Vancouver - Westside	23	1.01		4.08	5	6	-	6	5.35
165	Vancouver - Midtown	31	1.51	*	6.11	7	7	1	8	7.60
166	Vancouver - South	32	1.20		4.86	5	5	1	6	4.61
201	Surrey	114	1.19		4.80	12	12	7	19	3.66
202	South Surrey/White Rock	5	0.46		1.86	-	-	-	-	-
	PROVINCIAL TOTAL	**850**	**1.00**		**4.04**	**90**	**103**	**48**	**151**	**3.36**

Notes for this table follow the map.

FIGURE 36

INFANT MORTALITY BY LOCAL HEALTH AREA

BRITISH COLUMBIA, 2004-2008


N
QUINTILE (Ratio)
5 (>1.45)
4 (1.00-1.45)
3 (0.68-1.00)
3 (0.47-0.68)
1 (<0.47)
Statistically Significant
0 100 200 300 kms
see inset 1
Inset 2
0
see inset 2
Inset 1
0 50 kms

Notes to Table 26
Note: *Statistical testing indicates that observed deaths are signficantly different from the expected deaths (p<0.05, two tailed). +Denotes significance based on less than five deaths. Rate per 1,000 live births in the specified LHA. Ratio – observed over the expected deaths. Non- residents are excluded. Total includes residents with unknown LHA.

Note: Ratio - Observed over the expected. Refer to Figure 1 to clarify geographical location of L HAs.

TABLE 27

SELECTED CAUSES OF INFANT DEATHS AND STILLBIRTHS

BRITISH COLUMBIA, 2009

Cause of Death	ICD-10 Code(s)	Infant Deaths – Age Group (in Days) <7	7–27	28–364	Total	Rate [1]	Stillbirths Number	Rate [2]
Congenital anomalies								
- of the nervous system	Q00-Q07	-	-	-	-	-	2	0.44
- of the eye, ear, face & neck	Q10-Q18	-	-	-	-	-	-	-
- of the heart and circulatory system	Q20-Q28	4	1	6	11	2.45	5	1.10
- of the respiratory system	Q30-Q34	-	-	1	1	0.22	-	-
- of the digestive system	Q35-Q45	-	-	-	-	-	-	-
- of the genital organs	Q50-Q56	-	-	-	-	-	-	-
- of the urinary system	Q60-Q64	2	-	-	2	0.45	-	-
- of the musculoskeletal system	Q65-Q79	4	-	1	5	1.11	-	-
Other and multiple system syndromes	Q80-Q89	1	-	-	1	0.22	1	0.22
Chromosomal anomalies	Q90-Q99	2	1	1	4	0.89	-	-
Total deaths due to congenital anomalies	**Q00-Q99**	**13**	**2**	**9**	**24**	**5.34**	**8**	**1.76**
Perinatal conditions								
Infant affected by maternal factors	P00-P04	31	1	-	32	7.13	116	25.59
Premature/postmature and fetal growth disorders	P05-P08	19	2	1	22	4.90	16	3.53
Birth trauma	P10-P15	-	-	-	-	-	-	-
Respiratory and cardiovascular disorders	P20-P29	6	-	-	6	1.34	9	1.99
Infections specific to the perinatal period	P35-P39	3	1	-	4	0.89	1	0.22
Hemorrhage and hematological disorders	P50-P61	-	1	-	1	0.22	1	0.22
Transitory endocrine and metabolic disorders	P70-P74	-	-	-	-	-	-	-
Digestive system disorders of fetus and newborn	P75-P78	-	3	-	3	0.67	-	-
Other disorders originating in the perinatal period	P80-P94, P96	15	2	-	17	3.79	217	47.86
Fetal death of unknown cause	P95	-	-	-	-	-	59	13.01
Total deaths due to perinatal conditions	**P00-P96**	**74**	**10**	**1**	**85**	**18.93**	**419**	**92.42**
Pneumonia/influenza	J09-J18.1, J18.8-J18.9	-	-	2	2	0.45	-	-
Sudden infant death syndrome (SIDS)[3]	R95	-	-	10	10	2.23	-	-
Other causes[3]		3	1	26	30	6.68	2	0.44
TOTAL		**90**	**13**	**48**	**151**	**33.62**	**429**	**94.62**
PERCENT		**59.6**	**8.6**	**31.8**	**100.0**			

Note: [1] Rate per 10,000 live births.
[2] Rate per 10,000 total births (live births plus stillbirths).
[3] Some of the infant deaths that were still under investigation (ICD-10 code R99) may later be identified as SIDS.
The BC Coroners' Service classifies SIDS deaths as "SUDI" - please see glossary (under "SIDS") for explanation.
Non-residents are excluded.

Deaths Due to HIV

Mortality due to Human Immunodeficiency Virus (HIV) peaked in 1994 and has seen a general downward trend since then.

Table 28 shows the number of deaths due to HIV from 1994 to 2009 broken out by gender and six age groups. The percentage of the total deaths in each year is shown for each age group. At the bottom of the table are counts and percentages for the entire time period. Figure 37 shows that in the period from 2004-2009 most deaths due to HIV disease in BC occurred in individuals who were between 40 and 49 years of age.

Table 29 shows that the yearly numbers of HIV deaths over the past ten years numbers have fluctuated with no significantly increasing or decreasing trend. The HSDA 32-Vancouver had the highest mortality rate (13.72 deaths per 100,000 population), from 1994 to 2009. In 2009, there were 31 deaths due to HIV in that area, far higher than any other HSDA.

FIGURE 37

DEATHS DUE TO HIV DISEASE BY AGE GROUP

BRITISH COLUMBIA, 2004–2009

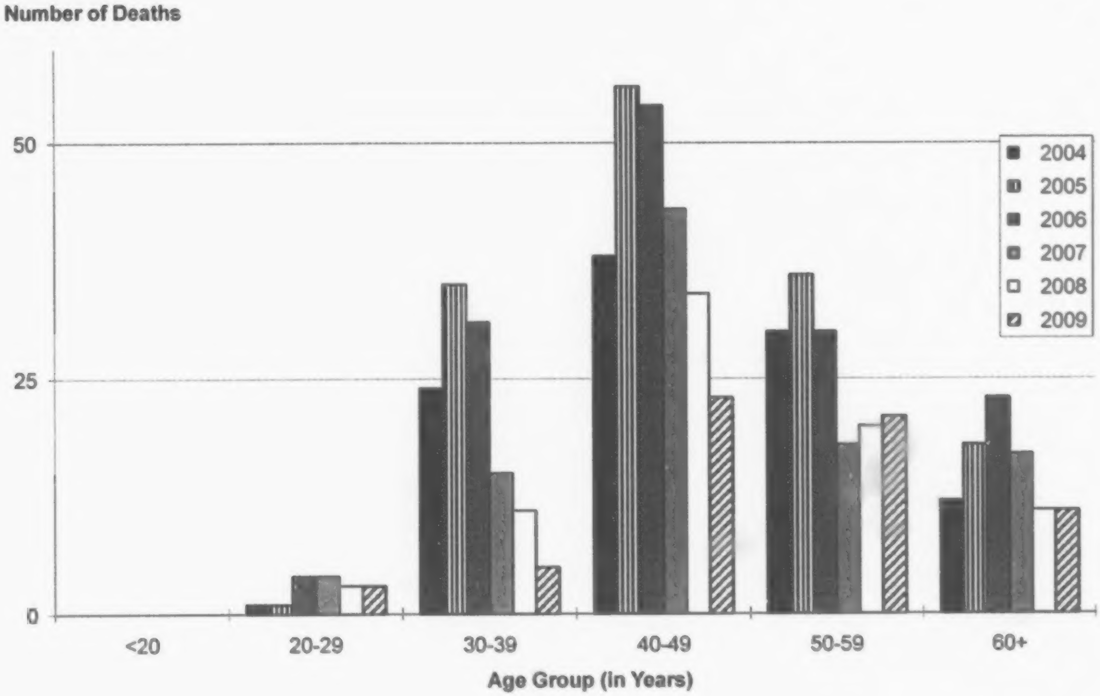


TABLE 28

DEATHS DUE TO HIV DISEASE BY GENDER AND AGE GROUP

BRITISH COLUMBIA, 1994–2009

Year of Death	Gender	Age at Death (in Years)						Total
		<20	20–29	30–39	40–49	50–59	60+	
1994	**M**	**-**	**19**	**147**	**101**	**29**	**12**	**308**
	F	**2**	**5**	**10**	**2**	**2**	**2**	**23**
	T	**2**	**24**	**157**	**103**	**31**	**14**	**331**
	Percent	**0.6**	**7.3**	**47.4**	**31.1**	**9.4**	**4.2**	**100.0**
1995	M	-	17	116	103	31	9	276
	F	-	6	7	4	1	1	19
	T	-	23	123	107	32	10	295
	Percent	-	7.8	41.7	36.3	10.8	3.4	100.0
1996	**M**	**3**	**9**	**107**	**73**	**34**	**10**	**236**
	F	**-**	**4**	**6**	**6**	**-**	**1**	**17**
	T	**3**	**13**	**113**	**79**	**34**	**11**	**253**
	Percent	**1.2**	**5.1**	**44.7**	**31.2**	**13.4**	**4.3**	**100.0**
1997	M	-	11	40	33	11	6	101
	F	-	2	7	4	1	2	16
	T	-	13	47	37	12	8	117
	Percent	-	11.1	40.2	31.6	10.3	6.8	100.0
1998	**M**	**-**	**6**	**32**	**44**	**7**	**4**	**93**
	F	**-**	**4**	**8**	**3**	**1**	**1**	**17**
	T	**-**	**10**	**40**	**47**	**8**	**5**	**110**
	Percent	**-**	**9.1**	**36.4**	**42.7**	**7.3**	**4.5**	**100.0**
1999	M	1	3	37	32	13	4	90
	F	-	-	4	7	2	-	13
	T	1	3	41	39	15	4	103
	Percent	1.0	2.9	39.8	37.9	14.6	3.9	100.0
2000	**M**	**-**	**5**	**31**	**31**	**23**	**8**	**98**
	F	**-**	**4**	**6**	**9**	**3**	**2**	**24**
	T	**-**	**9**	**37**	**40**	**26**	**10**	**122**
	Percent	**-**	**7.4**	**30.3**	**32.8**	**21.3**	**8.2**	**100.0**
2001	M	-	-	30	33	19	9	91
	F	-	4	8	4	3	1	20
	T	-	4	38	37	22	10	111
	Percent	-	3.6	34.2	33.3	19.8	9.0	100.0
2002	**M**	**-**	**4**	**20**	**37**	**15**	**8**	**84**
	F	**-**	**1**	**6**	**12**	**3**	**-**	**22**
	T	**-**	**5**	**26**	**49**	**18**	**8**	**106**
	Percent	**-**	**4.7**	**24.5**	**46.2**	**17.0**	**7.5**	**100.0**
2003	M	-	2	34	26	32	10	104
	F	-	4	6	10	3	-	23
	T	-	6	40	36	35	10	127
	Percent	-	4.7	31.5	28.3	27.6	7.9	100.0
2004	**M**	**-**	**-**	**17**	**30**	**29**	**10**	**86**
	F	**-**	**1**	**7**	**8**	**1**	**2**	**19**
	T	**-**	**1**	**24**	**38**	**30**	**12**	**105**
	Percent	**-**	**1.0**	**22.9**	**36.2**	**28.6**	**11.4**	**100.0**
2005	M	-	1	27	43	31	18	120
	F	-	-	8	13	5	-	26
	T	-	1	35	56	36	18	146
	Percent	-	0.7	24.0	38.4	24.7	12.3	100.0
2006	**M**	**-**	**2**	**22**	**43**	**27**	**20**	**114**
	F	**-**	**2**	**9**	**11**	**3**	**3**	**28**
	T	**-**	**4**	**31**	**54**	**30**	**23**	**142**
	Percent	**-**	**2.8**	**21.8**	**38.0**	**21.1**	**16.2**	**100.0**
2007	M	-	1	14	33	15	14	77
	F	-	3	1	10	3	3	20
	T	-	4	15	43	18	17	97
	Percent	-	4.1	15.5	44.3	18.6	17.5	100.0
2008	**M**	**-**	**1**	**7**	**28**	**14**	**10**	**60**
	F	**-**	**2**	**4**	**6**	**6**	**1**	**19**
	T	**-**	**3**	**11**	**34**	**20**	**11**	**79**
	Percent	**-**	**3.8**	**13.9**	**43.0**	**25.3**	**13.9**	**100.0**
2009	M	-	2	3	18	19	11	53
	F	-	1	2	5	2	-	10
	T	-	3	5	23	21	11	63
	Percent	-	4.8	7.9	36.5	33.3	17.5	100.0
1994-2009	**M**	**4**	**83**	**684**	**708**	**349**	**163**	**1,991**
	F	**2**	**43**	**99**	**114**	**39**	**19**	**316**
	T	**6**	**126**	**783**	**822**	**388**	**182**	**2,307**
	Percent	**0.3**	**5.5**	**33.9**	**35.6**	**16.8**	**7.9**	**100.0**

Note: HIV Disease – ICD-10 codes B20–B24.
Total percentage may not add up to 100 due to rounding. Non-residents are excluded.

TABLE 29

DEATHS DUE TO HIV DISEASE BY HEALTH SERVICE DELIVERY AREA

BRITISH COLUMBIA, 1994–2009

	Health Service Delivery Area	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	1994–2009		
																		Number	Percent	Rate
11	East Kootenay	-	1	-	2	-	-	-	1	-	1	-	1	-	-	-	-	6	0.3	0.49
12	Kootenay Boundary	1	3	2	-	1	1	-	-	2	-	1	-	2	-	2	-	15	0.7	1.20
13	Okanagan	6	9	7	2	4	2	3	3	3	6	2	5	11	1	2	2	68	2.9	1.36
14	Thompson Cariboo Shuswap	3	-	3	2	2	2	2	6	2	4	6	2	4	3	1	3	45	2.0	1.32
21	Fraser East	7	6	7	1	5	3	3	2	4	1	5	6	4	1	3	2	60	2.6	1.50
22	Fraser North	25	21	15	8	6	7	11	8	10	10	8	8	10	7	6	3	163	7.1	1.90
23	Fraser South	18	17	23	6	4	11	7	11	10	8	5	12	9	13	5	5	164	7.1	1.69
31	Richmond	6	4	4	5	2	2	1	1	-	1	2	3	1	1	2	1	36	1.6	1.31
32	Vancouver	203	182	146	66	65	53	73	60	62	74	50	78	67	42	27	31	1,279	55.4	13.72
33	North Shore/ Coast Garibaldi	15	12	11	7	5	5	3	3	2	6	3	7	5	5	7	2	98	4.2	2.32
41	South Vancouver Island	28	17	21	10	10	13	7	9	3	8	9	9	17	11	11	6	189	8.2	3.43
42	Central Vancouver Island	13	14	6	4	3	4	8	4	4	4	5	6	3	6	4	5	93	4.0	2.42
43	North Vancouver Island	3	2	1	1	-	-	4	2	-	1	2	3	2	-	2	-	23	1.0	1.25
51	Northwest	-	2	1	-	-	-	-	-	-	-	1	2	-	2	3	1	12	0.5	0.92
52	Northern Interior	2	4	5	2	2	-	-	1	3	3	5	4	7	5	2	2	47	2.0	1.99
53	Northeast	1	1	-	-	1	-	-	-	1	-	1	-	-	-	1	-	6	0.3	0.59
	N.S.	-	-	1	1	-	-	-	-	-	-	-	-	-	-	1	-	3	0.1	
	PROVINCIAL TOTAL	**331**	**295**	**253**	**117**	**110**	**103**	**122**	**111**	**106**	**127**	**105**	**146**	**142**	**97**	**79**	**63**	**2,307**	**100.0**	**3.53**

Note: Health Service Delivery Area based on usual residence.
Rate per 100,000 population in specified area.
Total percentage may not add up to 100 due to rounding.
Non-residents are excluded. N.S. – Not stated.

External Causes of Death

Table 30 shows the number of deaths for males and females from "external causes" which include unintentional deaths, deaths due to suicide or homicide, and deaths where intent was undetermined. Also shown are ASMRs. These rates of death per 10,000 standard population are used to compare statistics from other time periods and other jurisdictions. The Glossary explains ASMR and the Methodology section gives an example of the calculation method.

During 2009, there were 1,700 deaths due to external causes or approximately 54 external cause deaths for each 1,000 deaths in BC (see Table 30).

Of the 1,700 deaths:

- 452 were suicides
- 252 were motor vehicle accidents
- 417 were unintentional falls
- 270 were unintentional poisonings
- 31 were accidental drownings
- 73 were homicides
- 119 were due to other external causes

Males accounted for 67.1 percent of deaths by external causes as shown in Table 30. The leading four causes of external deaths in males in 2009 (in ASMR rank order) were suicide (1.50), unintentional poisoning (0.79), motor vehicle accidents (0.77), and unintentional falls (0.72). For females, the leading four (in ASMR rank order) were accidental falls (0.49), suicide (0.40), accidental poisoning (0.35), and motor vehicle accidents (0.28).

Table 31 shows the allocation of external death causes according to the LHA of the deceased's usual residence. The highest ASMRs in 2009 are found in the following LHAs (with 5 or more deaths): Ladysmith (11.19), Armstrong - Spallumcheen (9.05), Cariboo - Chilcotin (9.04), Vancouver Island North (9.00), and Vancouver - Downtown Eastside (7.99).

Table 32 shows the number of deaths from suicide classified by month of occurrence and by gender. Percentages across months are also given. In 2009, there were about 3.8 times more male suicides than female suicides. The data for 2009 shows that April was the month with the fewest number of suicides (26) while July was the month with the highest number of suicides (51).

Coroners' investigations into "externally caused" deaths can be lengthy, resulting in delays in determining the final causes. For this reason, recent year counts and rates may be underestimated and therefore should be interpreted with caution.

TABLE 30

EXTERNAL CAUSES OF DEATH BY GENDER

BRITISH COLUMBIA, 2009

Cause of Death	ICD-10 Code	Male		Female		Total	
		Number	ASMR	Number	ASMR	Number	ASMR
Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850	184	0.77	68	0.28	252	0.52
Other transport accidents	V01, V05-V06, V10-V11, V15-V18, V198-V199, V800-V802, V806-V809, V812-V819, V822-V829, V891, V893, V91, V93-V99, Y859	16	0.07	3	0.01	19	0.04
Accidental drowning (inc water transport)	V90, V92, W65-W74	26	0.10	5	0.02	31	0.06
Accidental falls	W00-W19	203	0.72	214	0.49	417	0.60
Accident caused by machinery	W24, W28-W31	1	-	-	-	1	-
Accidental firearm discharge	W32-W34	1	-	-	-	1	-
Exposure to smoke, fire and flames	X00-X09	17	0.06	15	0.06	32	0.06
Accidental poisoning	X40-X49	185	0.79	85	0.35	270	0.57
All other accidents	W20-W23, W25-W27, W35-W64, W75-W99, X10-X39, X50-X59, Y35-Y36, Y40-Y84, Y88	73	0.27	46	0.13	119	0.20
Suicide	X60-X84, Y870	357	1.50	95	0.40	452	0.94
Homicide	X85-Y09, Y871	56	0.27	17	0.08	73	0.18
External events of undetermined intent	Y10-Y34, Y872	14	0.06	10	0.04	24	0.05
Sequelae of other external causes	Y86, Y89	8	0.03	1	-	9	0.02
TOTAL		**1,141**	**4.65**	**559**	**1.86**	**1,700**	**3.23**

Note: ASMR – Age Standardized Mortality Rate per 10,000 standard population (Canada 1991 Census).
Non-residents are excluded.

EXTERNAL CAUSES OF DEATH BY LOCAL HEALTH AREA,
BRITISH COLUMBIA, 2009

Local Health Area		Motor Vehicle Accidents	Other Transport Accidents	Unintentional		Fire/ Flames	Unintentional Drowing	Suicide	Homicide	Other	Total	
				Poisoning	Falls						Deaths	ASMR
001	Fernie	2	-	1	2	-	1	3	-	-	9	5.37
002	Cranbrook	5	-	2	6	1	-	5	-	1	20	5.97
003	Kimberley	2	-	-	2	-	-	1	-	1	6	6.43
004	Windermere	2	-	-	3	-	-	1	-	-	6	4.04
005	Creston	1	-	-	4	-	-	1	1	1	8	4.08
006	Kootenay Lake	1	-	-	2	-	-	-	-	-	3	6.69
007	Nelson	1	-	-	4	1	1	2	-	-	9	3.16
009	Castlegar	-	-	-	1	-	-	2	-	1	4	2.85
010	Arrow Lakes	-	-	-	-	-	-	2	1	1	4	3.99
011	Trail	-	-	1	2	-	-	3	-	-	6	2.69
012	Grand Forks	-	-	-	2	-	-	3	-	-	5	4.04
013	Kettle Valley	1	-	1	-	-	-	1	-	-	3	6.87
014	Southern Okanagan	2	-	-	6	-	-	3	-	2	13	3.25
015	Penticton	3	-	7	13	1	-	5	1	1	31	5.33
016	Keremeos	1	-	-	-	-	-	-	-	1	2	2.43
017	Princeton	-	-	-	-	-	-	-	-	-	-	-
018	Golden	-	-	-	-	-	-	1	-	-	1	1.58
019	Revelstoke	1	1	-	-	-	-	2	-	1	5	5.64
020	Salmon Arm	6	2	2	4	-	1	2	-	-	17	4.55
021	Armstrong - Spallumcheen	2	-	1	1	-	-	2	-	1	7	9.05
022	Vernon	8	1	5	6	-	4	9	1	3	37	4.07
023	Central Okanagan	15	2	11	23	1	1	11	2	4	70	2.96
024	Kamloops	9	2	8	10	1	1	13	1	8	53	4.03
025	100 Mile House	6	-	-	2	-	1	1	1	1	12	6.08
026	North Thompson	2	-	-	1	-	-	-	-	-	3	5.07
027	Cariboo - Chilcotin	3	-	2	4	-	-	10	1	6	26	9.04
028	Quesnel	2	-	1	-	1	1	2	-	3	10	4.28
029	Lillooet	-	-	-	1	-	-	-	-	-	1	1.74
030	South Cariboo	1	-	2	2	-	-	-	-	2	7	7.95
031	Merritt	1	-	1	2	-	-	5	-	1	10	7.06
032	Hope	-	-	-	1	-	-	-	-	-	1	0.67
033	Chilliwack	1	1	5	9	1	2	6	-	5	30	2.98
034	Abbotsford	6	-	9	5	1	1	11	7	1	41	2.92
035	Langley	10	1	2	14	-	-	13	2	5	47	3.15
037	Delta	8	-	6	3	-	-	5	-	2	24	2.39
038	Richmond	2	-	2	8	-	-	7	4	3	26	1.13
040	New Westminster	-	-	2	8	1	1	3	-	2	17	2.14
041	Burnaby	3	1	5	14	2	-	19	7	5	56	2.13
042	Maple Ridge	4	-	7	6	-	1	10	4	1	33	3.56
043	Coquitlam	6	-	5	11	-	-	15	-	7	44	1.89
044	North Vancouver	2	-	6	8	2	1	14	2	2	37	2.17
045	West Vancouver-Bowen Is.	1	-	3	2	-	-	4	1	-	11	2.33
046	Sunshine Coast	4	1	2	4	-	1	-	-	2	14	3.38
047	Powell River	2	-	1	-	-	2	5	1	2	13	6.14
048	Howe Sound	3	-	3	1	2	1	4	-	5	19	6.05
049	Bella Coola Valley	-	-	-	-	-	-	-	-	1	1	3.96
050	Queen Charlotte	-	-	-	2	-	-	-	-	-	2	3.92
051	Snow Country	-	-	-	-	-	-	-	-	-	-	-
052	Prince Rupert	-	-	1	3	-	-	3	-	-	7	5.74
053	Upper Skeena	1	-	-	1	-	-	1	-	1	4	7.12
054	Smithers	4	-	-	4	-	-	2	-	-	10	6.57
055	Burns Lake	1	-	-	-	-	-	1	-	-	2	3.28
056	Nechako	2	-	-	1	-	-	1	-	-	4	3.35
057	Prince George	10	1	6	10	1	-	16	1	1	46	5.10
059	Peace River South	5	-	-	3	-	-	4	-	2	14	5.09
060	Peace River North	5	-	-	-	-	-	5	-	1	11	3.41
061	Greater Victoria	4	-	20	39	1	2	30	1	8	105	3.39
062	Sooke	4	-	4	5	1	-	4	-	3	21	3.08
063	Saanich	4	-	3	14	-	-	6	-	3	30	3.86
064	Gulf Islands	1	1	2	3	2	2	-	-	1	12	5.61
065	Cowichan	4	1	3	5	1	-	8	1	3	26	4.82
066	Lake Cowichan	1	-	1	1	1	-	-	-	-	4	4.87
067	Ladysmith	3	-	-	3	4	-	7	-	1	18	11.19
068	Nanaimo	6	-	5	13	-	1	14	-	3	42	3.35
069	Qualicum	2	-	2	8	-	-	4	-	-	16	2.01
070	Alberni	6	-	6	5	-	1	5	-	2	25	7.33
071	Courtenay	4	-	6	8	1	1	6	-	-	26	2.85
072	Campbell River	2	-	4	4	-	-	7	-	1	18	3.65
075	Mission	2	-	3	3	-	-	3	1	1	13	2.87
076	Agassiz - Harrison	1	-	1	3	-	-	1	-	-	6	5.83
077	Summerland	-	-	-	2	-	-	-	-	1	3	0.80
078	Enderby	1	-	-	-	-	-	1	-	-	2	4.51
080	Kitimat	-	-	-	2	-	-	3	1	1	7	7.14
081	Fort Nelson	2	-	-	-	-	-	-	-	-	2	3.13
083	Central Coast	-	-	-	1	-	-	1	-	-	2	12.96
084	Vancouver Island West	-	-	-	-	-	-	1	-	-	1	7.75
085	Vancouver Island North	1	-	2	2	-	-	3	1	1	10	9.00
087	Stikine	-	-	-	-	-	-	1	-	-	1	6.25
088	Terrace	3	-	-	4	-	-	2	-	-	9	4.44
092	Nisga'a	-	-	-	-	-	-	2	-	1	3	18.65
094	Telegraph Creek	-	-	-	-	-	-	1	-	-	1	12.28
161	Vancouver - City Centre	2	-	15	8	-	-	26	1	3	55	4.17
162	Vancouver - Downtown E.side	3	-	39	7	-	-	13	-	1	63	7.99
163	Vancouver - North East	3	1	6	3	1	-	7	4	5	30	2.46
164	Vancouver - Westside	5	-	2	10	-	1	8	2	6	34	1.88
165	Vancouver - Midtown	2	-	5	3	2	-	6	3	4	25	2.43
166	Vancouver - South	3	2	2	7	-	-	8	3	9	34	2.16
201	Surrey	19	-	25	24	2	2	27	15	7	121	3.14
202	South Surrey/White Rock	7	1	3	9	-	-	7	1	1	29	2.59
	PROVINCIAL TOTAL	**252**	**19**	**270**	**417**	**32**	**31**	**452**	**73**	**154**	**1,700**	**3.23**
	PERCENT	**14.8**	**1.1**	**15.9**	**24.5**	**1.9**	**1.8**	**26.6**	**4.3**	**9.1**	**100.0**	

Notes for table follow table 32.

TABLE 32

SUICIDE DEATHS BY MONTH AND GENDER

BRITISH COLUMBIA, 2009

Month	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
January	33	9.2	4	4.2	37	8.2
February	23	6.4	4	4.2	27	6.0
March	35	9.8	9	9.5	44	9.7
April	21	5.9	5	5.3	26	5.8
May	35	9.8	13	13.7	48	10.6
June	30	8.4	6	6.3	36	8.0
July	41	11.5	10	10.5	51	11.3
August	24	6.7	7	7.4	31	6.9
September	25	7.0	13	13.7	38	8.4
October	30	8.4	11	11.6	41	9.1
November	29	8.1	7	7.4	36	8.0
December	31	8.7	6	6.3	37	8.2
TOTAL	357	100.0	95	100.0	452	100.0

Note: Suicide Deaths – ICD-10 codes X60–X84, Y87.0.
Total percentage may not add up to 100 due to rounding.
Non-residents are excluded.

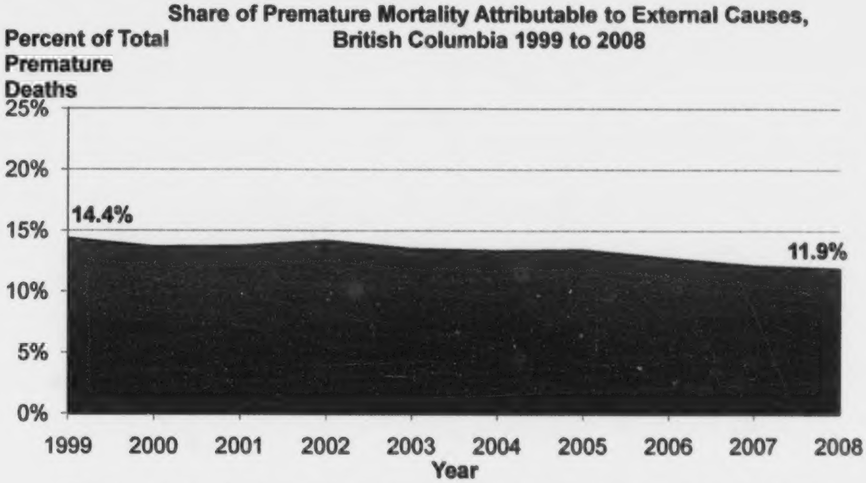
Notes to Table 31

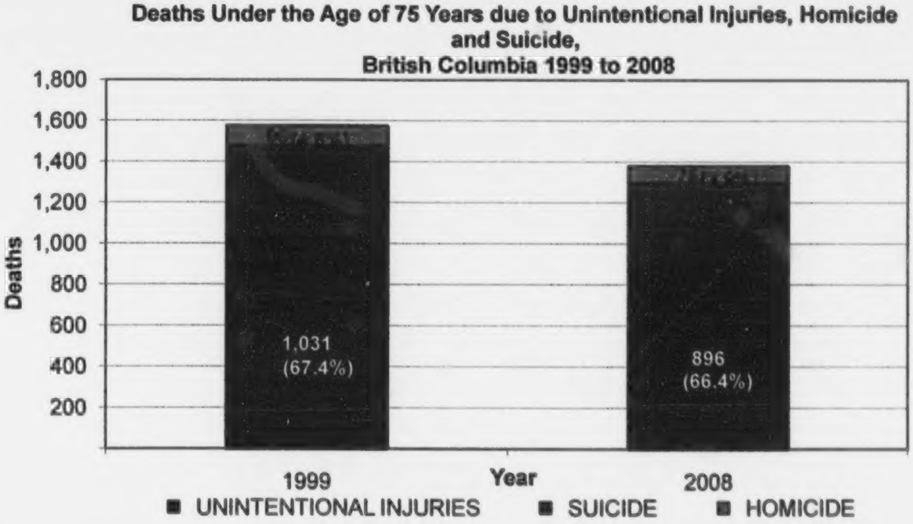
Note: Based on usual residence. ASMR – per 10,000 standard population (Canada 1991 Census). PERCENT – Provincial total for each cause as a percent of the Provincial total for all deaths from external causes. Other is comprised of accident caused by machinery, accidental firearm discharge, all other accidents, external event of undetermined intent, and sequelae of other external causes. Total includes residents with unknown LHA.

Vital Statistics Information Box

PREMATURE (<75 YEARS) EXTERNAL CAUSES OF DEATH IN BRITISH COLUMBIA, 1999 TO 2008

From 1999 to 2008, deaths among those under the age of 75 have accounted for just 38.5 percent of all deaths; however, 78.4 percent of deaths from external causes were in this age group. The total number of deaths attributable to external causes has fallen from 2,059 in 1999 to 1,843 in 2008, and among those under the age of 75, the number of deaths has fallen from 1,619 to 1,407. The share of premature deaths attributable to external causes has fallen from 14.4 percent in 1999 to 11.9 percent in 2008. Unintentional injuries account for the vast majority (63.7 percent in 2008) of deaths from external causes among those under the age of 75.


Share of Premature Mortality Attributable to External Causes, British Columbia 1999 to 2008


Deaths Under the Age of 75 Years due to Unintentional Injuries, Homicide and Suicide, British Columbia 1999 to 2008

Mortality Due to All Causes of Death

Table 33 shows the number of deaths from all causes in each LHA for 2009 and the previous five-year period. The Standardized Mortality Ratio (SMR) columns compare the actual number of deaths in the LHA (observed) with the number that would be expected if the LHA had the same age-specific death rates as the whole province.

Table 33 also shows 95 percent confidence intervals for the SMR, which provides a measure of its variability. Near half (41) of LHAs had statistically significant ratios in 2009 (28 high and 13 low), 61 LHAs had statistically significant ratios (45 high and 16 low) in the period of 2004-2008, and 38 LHAs had statistically significant ratios (25 high and 13 low) in both 2009 and the previous five-year period.

In 2009, the LHAs with the five highest statistically significant SMRs were Central Coast (2.21), Snow Country (2.02), Lillooet (1.71), Fort Nelson (1.56), and Terrace (1.43).

Figure 38 shows the SMRs grouped into colour-coded quintiles. The map provides an immediately apparent view of the provincial variation of SMRs. Lower ratios were more frequently observed in the south and higher ratios in central and northern BC.

Vital Statistics Information Box

DEATHS AGED 65+ BY GENDER AND HEALTH SERVICE DELIVERY AREA

BRITISH COLUMBIA, 2009

Health Service Delivery Area	Gender	Age at Death									%
		65-69	70-74	75-79	80-84	85-89	90-94	95-99	100+	Total	65+
11 East Kootenay	M	36	34	50	64	55	31	3	3	361	76.5%
	F	17	18	32	47	82	49	16	4	313	84.7%
12 Kootenay Boundary	M	42	41	44	61	51	27	15	0	363	77.4%
	F	20	28	39	73	63	60	23	5	363	85.7%
13 Okanagan	M	137	171	265	319	330	156	58	5	1,798	80.1%
	F	110	105	156	282	346	256	107	16	1,616	85.3%
14 Thompson Cariboo Shuswap	M	115	117	129	146	118	64	22	0	1,019	69.8%
	F	49	76	106	107	165	103	37	13	835	78.6%
21 Fraser East	M	100	97	142	157	166	89	25	6	1,074	72.8%
	F	62	85	118	172	169	149	84	9	1,017	83.4%
22 Fraser North	M	142	147	246	284	281	145	46	6	1,726	75.1%
	F	89	118	179	284	345	236	126	35	1,702	83.0%
23 Fraser South	M	164	178	262	284	352	189	58	9	2,036	73.5%
	F	130	158	223	347	424	304	154	39	2,138	83.2%
31 Richmond	M	29	49	58	70	71	36	14	1	427	76.8%
	F	21	29	55	67	86	81	32	7	450	84.0%
32 Vancouver	M	141	156	240	285	281	149	52	7	1,891	69.3%
	F	73	113	161	264	382	319	178	46	1,842	83.4%
33 North Shore/Coast Garibaldi	M	69	62	132	173	142	86	28	7	904	77.3%
	F	45	51	101	162	214	166	93	18	986	86.2%
41 South Vancouver Island	M	98	125	193	248	324	200	51	7	1,607	77.5%
	F	64	107	129	243	404	302	160	24	1,663	86.2%
42 Central Vancouver Island	M	107	118	188	228	196	99	28	4	1,283	75.4%
	F	64	87	124	190	201	174	83	14	1,146	81.8%
43 North Vancouver Island	M	50	57	69	70	56	33	8	0	500	68.6%
	F	28	31	50	76	84	53	19	5	436	79.4%
51 Northwest	M	39	29	38	32	26	8	2	0	291	59.8%
	F	9	20	24	20	25	13	10	0	181	66.9%
52 Northern Interior	M	53	52	68	79	57	19	6	1	513	65.3%
	F	30	39	48	62	60	37	12	4	396	73.7%
53 Northeast	M	19	23	21	21	21	9	0	1	191	60.2%
	F	10	10	24	19	15	18	7	1	150	69.3%
Provincial Total	**M**	**1,342**	**1,456**	**2,145**	**2,521**	**2,527**	**1,340**	**416**	**57**	**15,991**	**73.8%**
	F	**821**	**1,075**	**1,569**	**2,415**	**3,065**	**2,320**	**1,141**	**240**	**15,236**	**83.0%**

Note: %65+ is the percentage of deaths aged 65 or older out of all deaths to residents of the specified area by gender.

Provincial Total includes residents with unknown addresses.

Table 33

STANDARDIZED MORTALITY RATIO - ALL CAUSES OF DEATH BY LOCAL HEALTH AREA, BRITISH COLUMBIA, 2004–2008 AND 2009

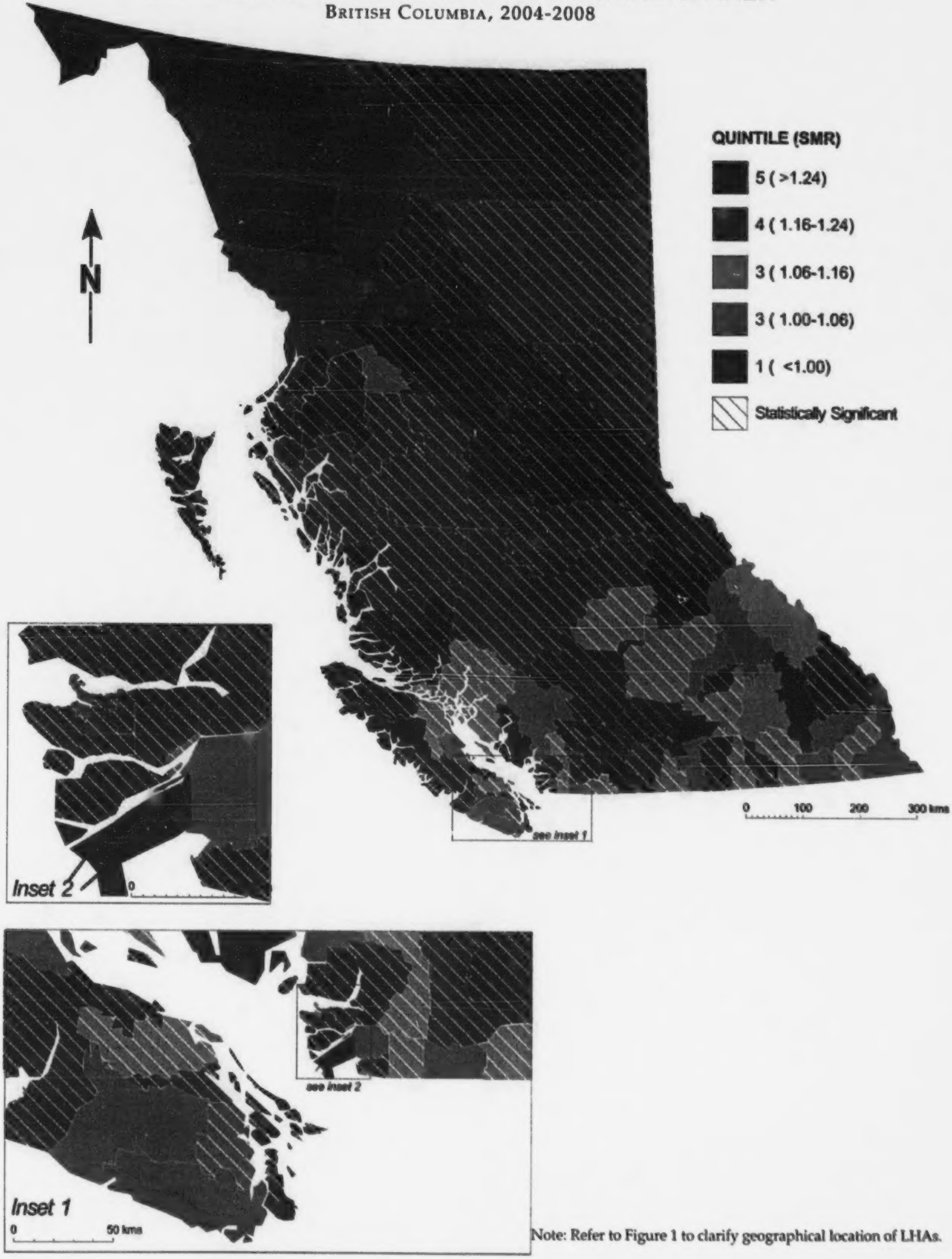
Local Health Area		2004–2008			2009				95% Confidence Interval		
		Observed Deaths	SMR	(p)	Observed Deaths	Expected Deaths	SMR	(p)	Lower		Upper
001	Fernie	417	1.04		94	79.17	1.19		0.96	-	1.45
002	Cranbrook	1,031	1.14	*	237	185.14	1.28	*	1.12	-	1.45
003	Kimberley	383	1.00		96	75.30	1.27	*	1.03	-	1.56
004	Windermere	252	0.77	*	47	66.71	0.70	*	0.52	-	0.94
005	Creston	708	1.03		161	137.54	1.17		1.00	-	1.37
006	Kootenay Lake	151	0.95		29	30.77	0.94		0.63	-	1.35
007	Nelson	945	1.07	*	190	175.04	1.09		0.94	-	1.25
009	Castlegar	632	1.21	*	107	101.13	1.06		0.87	-	1.28
010	Arrow Lakes	237	1.06		37	42.79	0.86		0.61	-	1.19
011	Trail	1,087	1.19	*	232	179.58	1.29	*	1.13	-	1.47
012	Grand Forks	506	1.11	*	108	91.48	1.18		0.97	-	1.43
013	Kettle Valley	121	0.83	*	23	32.54	0.71		0.45	-	1.06
014	Southern Okanagan	1,291	1.04		263	248.11	1.06		0.94	-	1.20
015	Penticton	2,598	1.04		574	490.96	1.17	*	1.08	-	1.27
016	Keremeos	344	1.16	*	65	58.01	1.12		0.86	-	1.43
017	Princeton	284	1.17	*	59	51.59	1.14		0.87	-	1.48
018	Golden	200	1.07		39	38.40	1.02		0.72	-	1.39
019	Revelstoke	261	1.03		62	50.89	1.22		0.93	-	1.56
020	Salmon Arm	1,617	1.01		342	325.95	1.05		0.94	-	1.17
021	Armstrong - Spallumcheen	376	0.95		82	84.23	0.97		0.77	-	1.21
022	Vernon	3,086	1.08	*	619	579.32	1.07		0.99	-	1.16
023	Central Okanagan	7,301	0.98		1,551	1,532.71	1.01		0.96	-	1.06
024	Kamloops	4,098	1.13	*	840	757.87	1.11	*	1.03	-	1.19
025	100 Mile House	622	1.14	*	142	112.24	1.27	*	1.07	-	1.49
026	North Thompson	193	1.39	*	35	27.90	1.25		0.87	-	1.74
027	Cariboo - Chilcotin	886	1.23	*	206	149.57	1.38	*	1.20	-	1.58
028	Quesnel	864	1.21	*	169	149.57	1.13		0.97	-	1.31
029	Lillooet	204	1.44	*	48	28.00	1.71	*	1.26	-	2.27
030	South Cariboo	356	1.27	*	77	58.11	1.33	*	1.05	-	1.66
031	Merritt	558	1.38	*	102	80.23	1.27	*	1.04	-	1.54
032	Hope	524	1.45	*	101	71.17	1.42	*	1.16	-	1.72
033	Chilliwack	3,428	1.12	*	741	632.67	1.17	*	1.09	-	1.26
034	Abbotsford	4,649	1.02		911	909.75	1.00		0.94	-	1.07
035	Langley	4,400	1.06	*	890	883.19	1.01		0.94	-	1.08
037	Delta	3,122	0.97		651	689.48	0.94		0.87	-	1.02
038	Richmond	4,482	0.75	*	877	1,242.48	0.71	*	0.66	-	0.75
040	New Westminster	2,576	1.16	*	481	432.44	1.11	*	1.02	-	1.22
041	Burnaby	6,882	0.93	*	1,344	1,455.57	0.92	*	0.87	-	0.97
042	Maple Ridge	2,734	1.11	*	598	514.34	1.16	*	1.07	-	1.26
043	Coquitlam	4,683	0.91	*	1,005	1,087.31	0.92	*	0.87	-	0.98
044	North Vancouver	4,134	0.91	*	793	929.47	0.85	*	0.79	-	0.91
045	West Vancouver-Bowen Is.	2,367	0.84	*	467	554.40	0.84	*	0.77	-	0.92
046	Sunshine Coast	1,355	0.99		272	280.88	0.97		0.86	-	1.09
047	Powell River	974	1.08	*	211	182.95	1.15	*	1.00	-	1.32
048	Howe Sound	589	1.02		121	122.06	0.99		0.82	-	1.18
049	Bella Coola Valley	101	1.24	*	14	16.12	0.87		0.47	-	1.46
050	Queen Charlotte	161	1.37	*	34	24.13	1.41		0.98	-	1.97
051	Snow Country	16	1.22		4	1.98	2.02		0.54	-	5.18
052	Prince Rupert	474	1.28	*	90	75.51	1.19		0.96	-	1.47
053	Upper Skeena	127	1.05		23	24.14	0.95		0.60	-	1.43
054	Smithers	440	1.17	*	86	79.66	1.08		0.86	-	1.33
055	Burns Lake	272	1.19	*	60	45.58	1.32	*	1.00	-	1.69
056	Nechako	523	1.40	*	101	79.98	1.26	*	1.03	-	1.53
057	Prince George	2,739	1.24	*	579	462.47	1.25	*	1.15	-	1.36
059	Peace River South	808	1.19	*	176	139.86	1.26	*	1.08	-	1.46
060	Peace River North	727	1.19	*	142	124.88	1.14		0.96	-	1.34
061	Greater Victoria	10,802	1.00		2,130	2,046.14	1.04		1.00	-	1.09
062	Sooke	1,666	1.00		362	355.70	1.02		0.92	-	1.13
063	Saanich	3,232	0.85	*	631	764.73	0.83	*	0.76	-	0.89
064	Gulf Islands	679	0.78	*	147	174.59	0.84	*	0.71	-	0.99
065	Cowichan	2,329	1.04	*	439	462.61	0.95		0.86	-	1.04
066	Lake Cowichan	220	1.04		39	43.77	0.89		0.63	-	1.22
067	Ladysmith	1,051	1.16	*	247	181.30	1.36	*	1.20	-	1.54
068	Nanaimo	4,472	1.06	*	875	857.29	1.02		0.95	-	1.09
069	Qualicum	2,474	0.93	*	530	551.51	0.96		0.88	-	1.05
070	Alberni	1,430	1.24	*	299	237.22	1.26	*	1.12	-	1.41
071	Courtenay	2,535	1.00		532	536.71	0.99		0.91	-	1.08
072	Campbell River	1,461	1.14	*	318	274.25	1.16	*	1.04	-	1.29
075	Mission	1,391	1.22	*	261	231.18	1.13		1.00	-	1.27
076	Agassiz - Harrison	314	0.87	*	77	67.35	1.14		0.90	-	1.43
077	Summerland	696	0.96		133	145.10	0.92		0.77	-	1.09
078	Enderby	407	1.26	*	68	64.60	1.05		0.82	-	1.33
080	Kitimat	290	1.17	*	70	53.01	1.32	*	1.03	-	1.67
081	Fort Nelson	93	1.31	*	23	14.74	1.56		0.99	-	2.34
083	Central Coast	59	1.92	*	12	5.43	2.21	*	1.14	-	3.86
084	Vancouver Island West	60	0.92		13	11.65	1.12		0.59	-	1.91
085	Vancouver Island North	404	1.60	*	73	52.79	1.38	*	1.08	-	1.74
087	Stikine	22	0.86		5	4.90	1.02		0.33	-	2.38
088	Terrace	625	1.29	*	147	102.88	1.43	*	1.21	-	1.68
092	Nisga'a	73	1.90	*	10	8.15	1.23		0.59	-	2.26
094	Telegraph Creek	19	1.29		3	2.32	1.29		0.26	-	3.77
161	Vancouver - City Centre	3,129	1.01		679	620.04	1.10	*	1.01	-	1.18
162	Vancouver - Downtown E.side	2,564	1.22	*	470	392.10	1.20	*	1.09	-	1.31
163	Vancouver - North East	2,889	0.87	*	582	686.06	0.85	*	0.78	-	0.92
164	Vancouver - Westside	3,722	0.80	*	711	907.00	0.78	*	0.73	-	0.84
165	Vancouver - Midtown	2,323	0.92	*	454	502.65	0.90	*	0.82	-	0.99
166	Vancouver - South	4,183	0.84	*	837	975.73	0.86	*	0.80	-	0.92
201	Surrey	8,516	1.01		1,786	1,855.96	0.96		0.92	-	1.01
202	South Surrey/White Rock	4,307	0.93	*	847	954.17	0.89	*	0.83	-	0.95
	PROVINCIAL TOTAL	153,385	1.00		31,227	31,227.00	1.00		0.99	-	1.01

Note: SMR - Standardized Mortality Ratio. *Statistical testing indicates that observed deaths are significantly different from the expected deaths ($p<0.05$, two tailed). Total includes residents with unknown LHA. Observed deaths include unknown gender.

FIGURE 38

ALL CAUSES OF DEATH BY LOCAL HEALTH AREA

BRITISH COLUMBIA, 2004-2008


N
QUINTILE (SMR)
5 (>1.24)
4 (1.16-1.24)
3 (1.06-1.16)
3 (1.00-1.06)
1 (<1.00)
Statistically Significant
0
100
200
300 kms
see inset 1
Inset 2
0
see inset 2
Inset 1
0
50 kms

Note: Refer to Figure 1 to clarify geographical location of LHAs.

Potential Years of Life Lost

Potential Years of Life Lost (PYLL) gives an indication of "premature" death by totalling the number of years British Columbians "lost" prior to age 75 years. For example, an infant death at the age of 6 months would have lost 74.5 years of life. The upper limit of 75 is used for both genders. PYLL indicates the importance of the various causes of premature death by giving more weight to deaths that occurred at younger ages than those that occurred later in life. Bear in mind that the PYLL is weighted according to age. Thus a death at a younger age contributes more to total PYLL than a death at an older age.

The tables and figures in this section portray the impact of premature mortality. The Glossary further defines PYLL. The precise calculation methods for the various indicators derived from PYLL are referenced in the tables in this section and are shown in the Methodology section.

Table 34 shows several PYLL based indicators for deaths of those under 75 years of age contrasted with total deaths and ASMR for all ages for various causes of death. The No. of Deaths column shows the number of persons under 75 years of age who have died due to each cause group. The Percent of PYLL column shows each disease category's proportion of the total PYLL for all causes. The Average PYLL column is the disease category's Total PYLL divided by number of deaths. The PYLLSR column is the rate of PYLL per 1,000 standard population. See PYLL Standardized Rate in the Glossary and the Methodology section for computation details.

Because PYLL focuses on premature mortality rather than on the simple fact of death, it is useful in assessing causes of death in terms of the extent to which each contributes to reduction in lifespan. In Table 34, the column labelled Average PYLL is helpful in exploring this effect.

Motor vehicle accidents (MVAs), which claim many young lives, have a high value for average PYLL at 34.9 years. Malignant neoplasms, on the other hand, although claiming many lives (4,526 under the age of 75) have a relatively low average PYLL at 12.7 years since malignant neoplasms tend to afflict older individuals more frequently.

Figure 39 allows one to compare the profiles of the two sides of the graph by directly and visually contrasting PYLLSR and ASMR for several major causes of death, where there are significant differences in the impact of the various causes of death on PYLL and overall death rate. The clearest contrast is for external causes of death: a relatively moderate ASMR but very high PYLLSR. This clearly shows the contribution of "external causes" to premature mortality.

In Table 35, causes of death in 2009 have been ranked according to the Total PYLL for all genders in four age groups. The central portion of the table indicates the number of deaths and number of years lost for males, females, and both genders. The PYLL column shows all the years lost in the age group due to each cause category. The PYLL % column indicates the percent of all PYLL in the age group due to each cause.

Most of the PYLL under 15 years were due to conditions originating in the perinatal period around birth (see Table 35). The majority of those deaths occurred less than 7 days after birth (see Table 27) and were more frequent among females than males (see Table 21).

MVAs had the highest PYLL in the age group of 15 to 24 year olds. Most of these deaths were to males, and therefore, the majority of the PYLL in this age group was attributable to males as shown in Table 35.

In the age group of 25 to 44 year olds, among females, malignant neoplasms were responsible for more than the number of PYLL as all the other major causes combined. Among males, suicides accounted for the largest number of PYLL, although PYLL due to MVA and malignant neoplasms were high among males as well. Note that male deaths due to MVA were responsible for a greater number of deaths than in the 15 to 24 year age group but fewer PYLL.

Malignant neoplasms accounted for the largest share of PYLL for both genders in the 45-74 year age group (see Table 35).

Figure 40 presents the PYLLSR values from Table 35, so the gender differences are immediately apparent.

Males in the last three age groups have a higher PYLL than females, although the standardized PYLL rates due to malignant neoplasms were similar in the two adult age groups.

External causes have been covered in a previous section, but Table 36 presents their geographic distribution in terms of PYLL index. These causes in general are considered to be more preventable than 'natural' causes of death and therefore attract attention because of the greater potential for their reduction.

Table 36 shows PYLL due to external causes of death by LHA for the period 2004 to 2008 and for the year 2009. It also displays the observed number of years of lost life in each LHA for both periods and, for 2009, the expected PYLL based on the age distribution in the LHA adjusted to the provincial age and gender specific rate.

During the period, nearly half (44) of the LHAs had PYLL Indices that indicated significant differences compared to BC as a whole. Of these, 32 were higher than expected.

Vital Statistics Information Box

AGE AT DEATH OF THE OLDEST MALE AND FEMALE
BRITISH COLUMBIA, 1990-2009

Gender	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Male	113	105	111	111	109	108	108	106	109	108	109	104	104	107	106	107	105	107	106	105
Female	110	113	107	110	110	108	109	111	113	108	111	113	111	107	108	110	109	110	110	109

TABLE 34

POTENTIAL YEARS OF LIFE LOST AND AGE STANDARDIZED MORTALITY RATES BY SELECTED CAUSES OF DEATH

BRITISH COLUMBIA, 2009

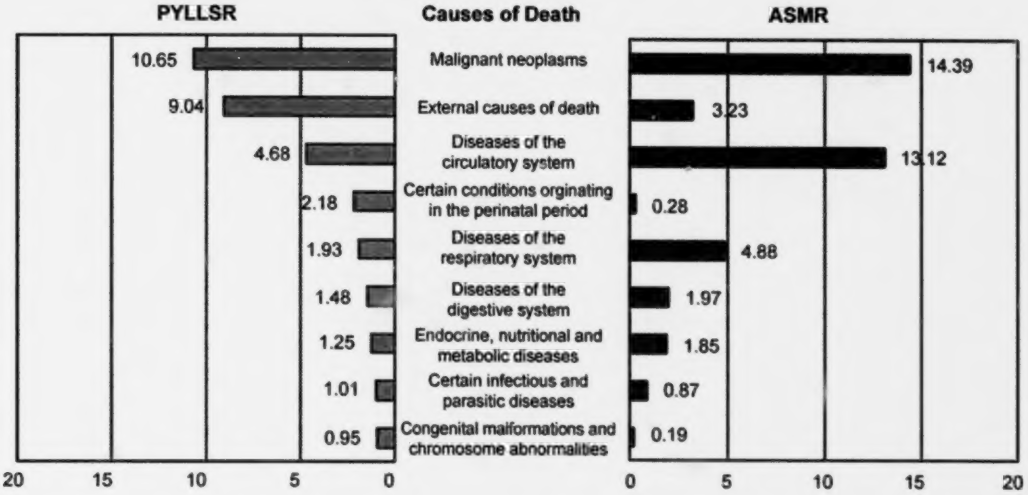
		PYLL (Age Under 75 Years)					Mortality (All Ages)		
Cause of Death	ICD-10 Code(s)	No. of Deaths	Total PYLL	Percent of PYLL	Average PYLL	PYLLSR	No. of Deaths	Percent of Deaths	ASMR
Certain infectious and parasitic diseases	A00-B99	258	4,965.5	2.6	19.2	1.01	569	1.8	0.87
- HIV disease	B20-B24	60	1,495.0	0.8	24.9	0.31	63	0.2	0.11
Malignant neoplasms	C00-C97	4,526	57,400.0	30.3	12.7	10.65	8,914	28.5	14.39
- Malignant neoplasm of trachea and lung	C33-C34	1,255	13,227.5	7.0	10.5	2.32	2,270	7.3	3.75
- Malignant neoplasm of female breast	C500-C509	357	5,422.5	2.9	15.2	2.02	596	1.9	1.82
- Malignant neoplasm of colon and rectum	C18-C21	461	5,767.5	3.0	12.5	1.04	978	3.1	1.54
Endocrine nutritional and metabolic diseases	E00-E89	429	6,093.0	3.2	14.2	1.25	1,210	3.9	1.85
- Diabetes mellitus	E10-E14	323	3,537.5	1.9	11.0	0.64	962	3.1	1.46
Diseases of the circulatory system	I00-I99	2,058	24,969.5	13.2	12.1	4.68	9,290	29.7	13.12
- Ischemic heart diseases	I20-I25	1,147	13,187.5	7.0	11.5	2.34	4,362	14.0	6.26
- Cerebrovascular diseases	I60-I69	381	4,197.5	2.2	11.0	0.79	2,299	7.4	3.17
Diseases of the respiratory system	J00-J98	801	9,742.0	5.1	12.2	1.93	3,398	10.9	4.88
- Pneumonia/Influenza (excluding hypostatic)	J09-J181, J188, J189	254	4,133.0	2.2	16.3	0.85	1,292	4.1	1.77
- Chronic Pulmonary Disease	J40-J44	360	3,022.0	1.6	8.4	0.57	1,413	4.5	2.10
Diseases of the digestive system	K00-K93	560	8,140.0	4.3	14.5	1.48	1,303	4.2	1.97
- Chronic liver disease/cirrhosis	K70, K73-74, K760-K761	277	4,502.5	2.4	16.3	0.79	342	1.1	0.56
Congenital malformations and chromosome abnormalities	Q00-Q99	67	3,144.5	1.7	46.9	0.95	78	0.2	0.19
Certain conditions originating in the perinatal period	P00-P96	87	6,412.5	3.4	73.7	2.18	87	0.3	0.28
External causes of death	V01-Y98	1,231	36,962.5	19.5	30.0	9.04	1,700	5.4	3.23
- Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850	209	7,286.5	3.8	34.9	1.80	252	0.8	0.52
- Suicide	X60-X84, Y870	423	12,647.5	6.7	29.9	3.10	452	1.4	0.94
Other causes[1]		1,454	31,457.5	16.6	21.6	7.32	4,678	15.0	7.04
All causes		**11,471**	**189,287.0**	**100.0**	**16.5**	**40.48**	**31,227**	**100.0**	**47.82**

Note: PYLL – denotes the total number of years of life lost from an established life expectancy (75 years).
PYLLSR – per 1,000 standard population (Canada 1991 Census).
ASMR – per 10,000 standard population (Canada 1991 Census).
[1] Other causes includes undetermined and pending.
Total percentage may not add up to 100 due to rounding. Non-residents are excluded.
The output from ICD-10 mortality coding and underlying cause of death selection was modified in BC to reflect the intent of certifiers in this jurisdiction and to provide greater continuity over time. Data using the standard ICD-10 rules for such categories as pneumonia/influenza, diabetes, or cancer should not be compared to the numbers shown above.

FIGURE 39

POTENTIAL YEARS OF LIFE LOST AND AGE STANDARDIZED MORTALITY RATES BY SELECTED CAUSES OF DEATH

BRITISH COLUMBIA, 2009



Note: PYLLSR - Potential Years of Life Lost Standardized Rate (age under 75 years) per 1,000 standard population.
ASMR - Age Standardized Mortality Rate per 10,000 standard population.

rates
statistic
ratios

TABLE 35

POTENTIAL YEARS OF LIFE LOST BY AGE GROUP AND MAJOR CAUSES OF DEATH (AGE UNDER 75 YEARS)

BRITISH COLUMBIA, 2009

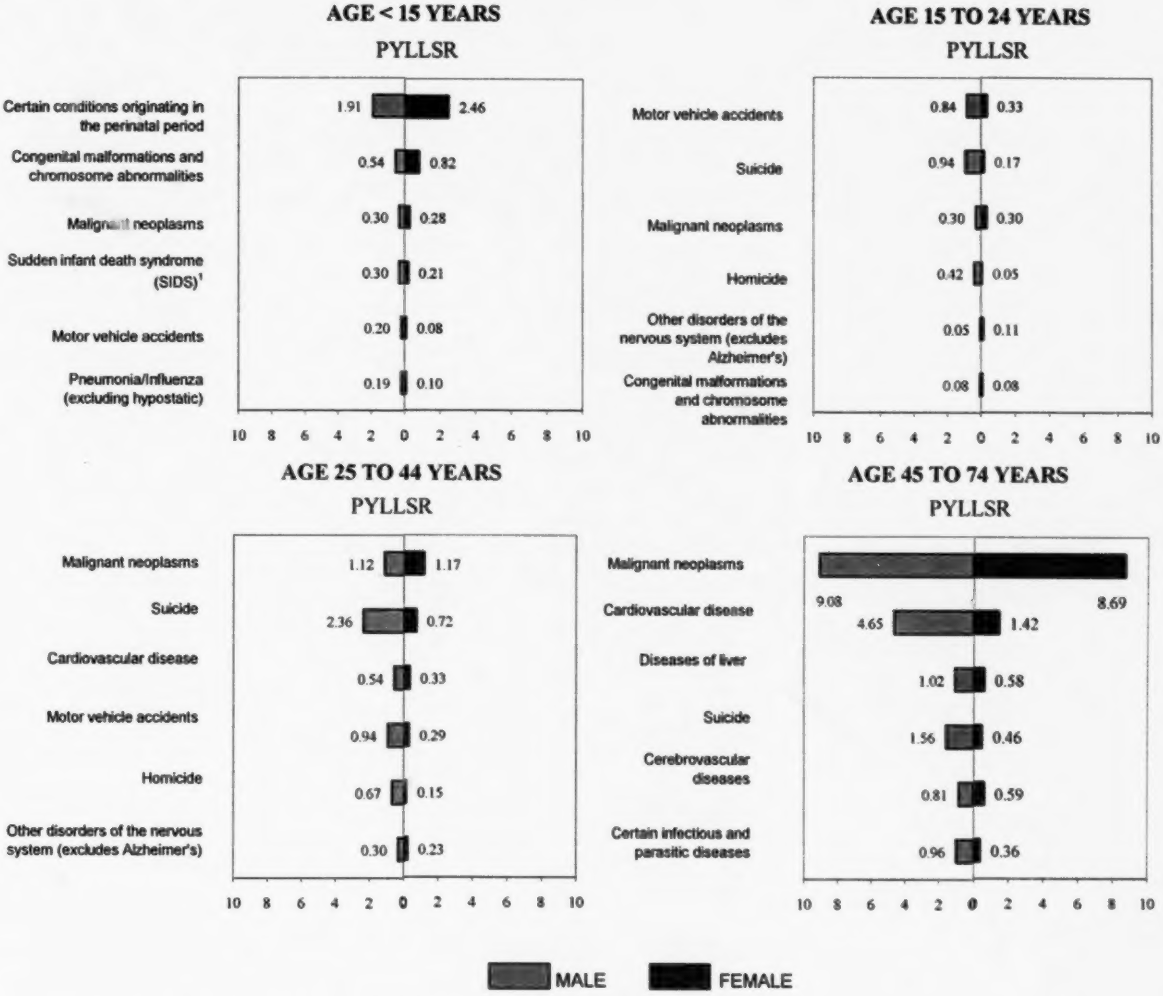
		Male				Female				Total			
Cause of Death	ICD-10 Code(s)	Deaths	PYLL	PYLL %	PYLLSR	Deaths	PYLL	PYLL %	PYLLSR	Deaths	PYLL	PYLL %	PYLLSR
Under 15 Years Old													
Certain conditions originating in the perinatal period	P00-P96	38	2,831.0	36.8	1.91	48	3,564.0	44.8	2.46	86	6,395.0	40.9	2.18
Congenital malformations and chromosome abnormalities	Q00-Q99	11	810.0	10.5	0.54	16	1,189.5	15.0	0.82	27	1,999.5	12.8	0.68
Malignant neoplasms	C00-C97	7	472.0	6.1	0.30	6	420.5	5.3	0.28	13	892.5	5.7	0.29
Sudden infant death syndrome (SIDS)[2]	R95	6	447.0	5.8	0.30	4	298.0	3.8	0.21	10	745.0	4.8	0.25
Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850	5	327.0	4.2	0.20	2	134.5	1.7	0.08	7	461.5	2.9	0.14
Pneumonia/Influenza (excl. hypostatic)	J09-J181, J188, J189	4	284.0	3.7	0.19	2	144.0	1.8	0.10	6	428.0	2.7	0.14
Other causes[1]		36	2,527.0	32.8	1.64	31	2,196.0	27.6	1.46	67	4,723.0	30.2	1.55
All causes		**107**	**7,698.0**	**100.0**	**5.09**	**109**	**7,946.5**	**100.0**	**5.40**	**216**	**15,644.5**	**100.0**	**5.24**
15-24 Years Old													
Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850	31	1,707.5	16.5	0.84	12	650.0	16.8	0.33	43	2,357.5	16.6	0.59
Suicide	X60-X84, Y870	35	1,912.5	18.5	0.94	6	325.0	8.4	0.17	41	2,237.5	15.7	0.56
Malignant neoplasms	C00-C97	11	612.5	5.9	0.30	11	592.5	15.3	0.30	22	1,205.0	8.5	0.30
Homicide	X85-Y09, Y871	16	860.0	8.3	0.42	2	105.0	2.7	0.05	18	965.0	6.8	0.24
Other disorders of the nervous system (excl. Alzheimer's)	G00-G25, G31-G99	2	105.0	1.0	0.05	4	215.0	5.5	0.11	6	320.0	2.2	0.08
Congenital malformations and chromosome abnormalities	Q00-Q99	3	157.5	1.5	0.08	3	162.5	4.2	0.08	6	320.0	2.2	0.08
Other causes[1]		92	5,005.0	48.3	2.46	34	1,830.0	47.2	0.94	126	6,835.0	48.0	1.71
All causes		**190**	**10,360.0**	**100.0**	**5.10**	**72**	**3,880.0**	**100.0**	**1.99**	**262**	**14,240.0**	**100.0**	**3.57**
25-44 Years Old													
Malignant neoplasms	C00-C97	77	2,862.5	10.4	1.12	105	3,782.5	26.0	1.17	182	6,645.0	15.8	1.14
Suicide	X60-X84, Y870	126	4,955.0	18.0	2.36	41	1,602.5	11.0	0.72	167	6,557.5	15.6	1.53
Cardiovascular disease	I00-I51	55	1,957.5	7.1	0.54	21	802.5	5.5	0.33	76	2,760.0	6.6	0.44
Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850	49	1,962.5	7.1	0.94	18	700.0	4.8	0.29	67	2,662.5	6.3	0.61
Homicide	X85-Y09, Y871	27	1,167.5	4.2	0.67	8	305.0	2.1	0.15	35	1,472.5	3.5	0.41
Other disorders of the nervous system (excl. Alzheimer's)	G00-G25, G31-G99	20	770.0	2.8	0.30	13	492.5	3.4	0.23	33	1,262.5	3.0	0.27
Other causes[1]		361	13,802.5	50.2	5.65	180	6,850.0	47.1	2.72	541	20,652.5	49.2	4.17
All causes		**715**	**27,477.5**	**100.0**	**11.57**	**386**	**14,535.0**	**100.0**	**5.62**	**1,101**	**42,012.5**	**100.0**	**8.57**
45-74 Years Old													
Malignant neoplasms	C00-C97	2,351	25,692.5	35.7	9.08	1,958	22,965.0	50.6	8.69	4,309	48,657.5	41.4	8.92
Cardiovascular disease	I00-I51	1,075	12,502.5	17.4	4.65	405	3,682.5	8.1	1.42	1,480	16,185.0	13.8	3.05
Diseases of liver	K70-K76	190	2,725.0	3.8	1.02	105	1,587.5	3.5	0.58	295	4,312.5	3.7	0.80
Suicide	X60-X84, Y870	174	3,060.0	4.3	1.56	41	792.5	1.7	0.46	215	3,852.5	3.3	1.01
Cerebrovascular diseases	I60-I69	211	2,037.5	2.8	0.81	150	1,440.0	3.2	0.59	361	3,477.5	3.0	0.70
Certain infectious and parasitic diseases	A00-B99	154	2,460.0	3.4	0.96	67	912.5	2.0	0.36	221	3,372.5	2.9	0.66
Other causes[1]		1,818	23,485.0	32.6	10.06	1,193	14,047.5	30.9	5.91	3,011	37,532.5	32.0	7.99
All causes		**5,973**	**71,962.5**	**100.0**	**28.12**	**3,919**	**45,427.5**	**100.0**	**18.00**	**9,892**	**117,390.0**	**100.0**	**23.10**

Note: PYLL – Potential Years of Life Lost, denotes the total number of years of life lost from an established life expectancy (75 years). PYLLSR – PYLL Standardized Rate per 1,000 standard population (Canada 1991 Census). [1] Other causes includes undetermined and pending. Causes of death are ordered by total PYLL in the age group. Total percentage may not add up to 100 due to rounding. Non-residents are excluded. The output from ICD-10 mortality coding and underlying cause of death selection was modified in British Columbia to reflect the intent of certifiers in this jurisdiction and to provide greater continuity over time. Data using the standard ICD-10 rules for such categories as pneumonia/influenza, diabetes, or cancer should not be compared to the numbers shown above. [2] The BC Coroners' Service classifies SIDS deaths as "SUDI" - please see glossary (under "SIDS") for explanation.

FIGURE 40

POTENTIAL YEARS OF LIFE LOST STANDARDIZED RATES BY AGE GROUP AND GENDER MAJOR CAUSES OF DEATH (AGE UNDER 75 YEARS)

BRITISH COLUMBIA, 2009



Note: Causes of death are ordered by total deaths (Table 35).
PYLLSR-PYLL Standardized Rate per 1,000 population.
[1] The BC Coroners' Service classifies SIDS deaths as "SUDI" - please see glossary (under "SIDS") for explanation.

POTENTIAL YEARS OF LIFE LOST BY LOCAL HEALTH AREA
EXTERNAL CAUSES OF DEATH (AGE UNDER 75 YEARS), BRITISH COLUMBIA, 2004–2008 AND 2009

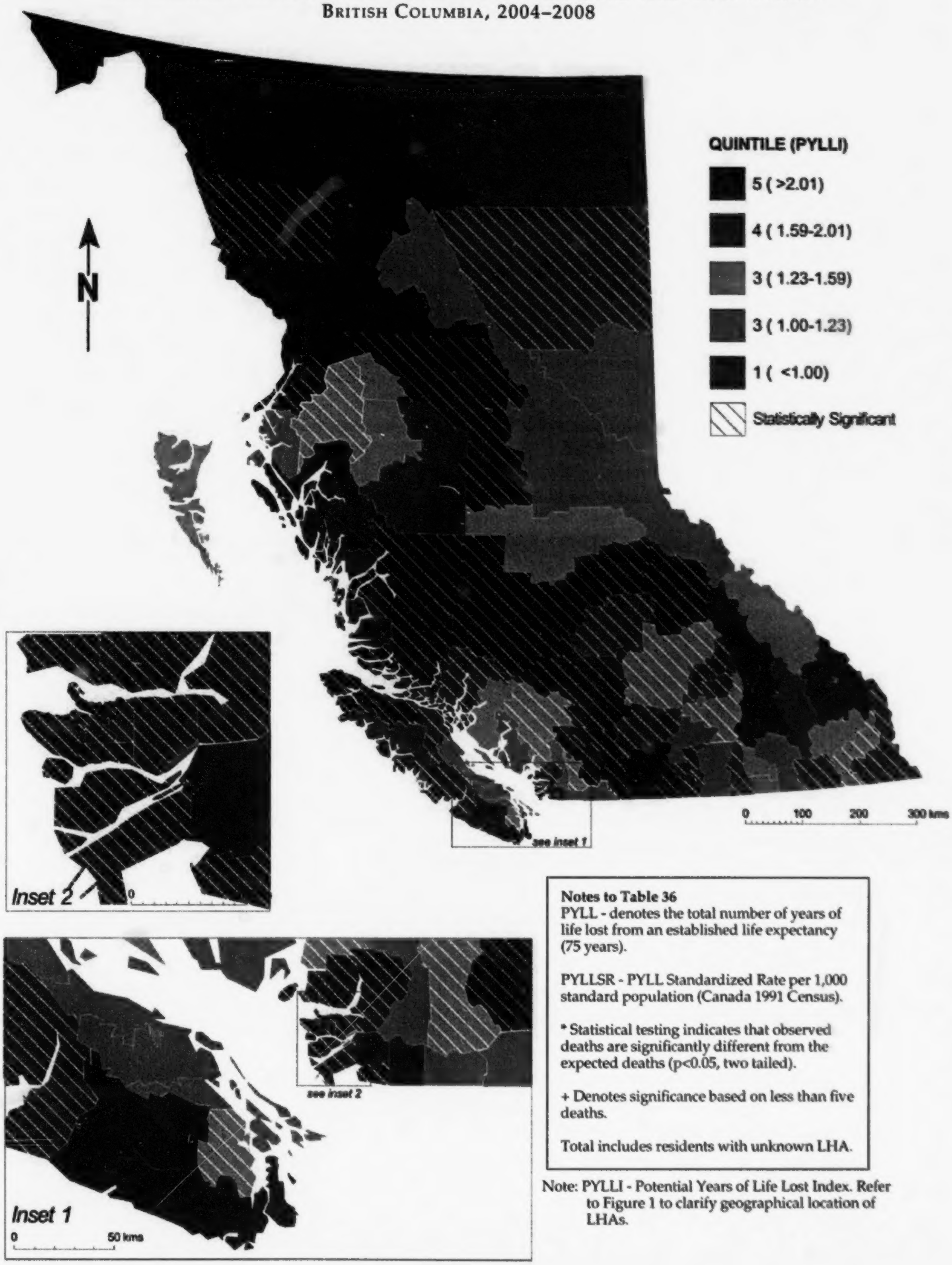
Local Health Area		2004–2008 Observed Deaths	2004–2008 Observed PYLL	2004–2008 PYLL Index	(p)	2009 Observed Deaths	2009 Observed PYLL	2009 Expected PYLL	2009 PYLL Index	(p)	95% Confidence Limit Lower	95% Confidence Limit Upper
001	Fernie	43	1,467.5	1.79	*	8	210.0	127.69	1.64		0.24	3.05
002	Cranbrook	64	1,920.0	1.51	*	12	320.0	201.49	1.59		0.53	2.64
003	Kimberley	18	510.0	1.30		3	112.5	65.39	1.72		0.00	3.71
004	Windermere	17	472.5	0.94		3	52.5	88.45	0.59		0.00	1.38
005	Creston	33	927.5	1.82	*	4	85.0	83.84	1.01		0.00	2.25
006	Kootenay Lake	11	312.5	1.80		2	60.0	28.28	2.12		0.00	5.80
007	Nelson	53	1,517.5	1.18		4	135.0	204.25	0.66		0.00	1.34
009	Castlegar	28	1,052.0	1.58		3	67.5	107.31	0.63		0.00	1.54
010	Arrow Lakes	13	442.5	2.09		3	57.5	33.42	1.72		0.00	3.68
011	Trail	46	1,339.0	1.43		5	97.5	146.89	0.66		0.00	1.37
012	Grand Forks	28	760.0	1.91	*	4	95.0	63.07	1.51		0.00	3.05
013	Kettle Valley	9	197.5	1.21		2	55.0	26.12	2.11		0.00	5.21
014	Southern Okanagan	41	1,257.5	1.64	*	5	92.5	126.84	0.73		0.00	1.48
015	Penticton	92	2,970.0	1.60	*	17	507.5	298.57	1.70		0.81	2.59
016	Keremeos	22	695.0	3.53	*	2	30.0	32.49	0.92		0.00	2.59
017	Princeton	14	465.0	2.17		-	-	33.66	-		-	-
018	Golden	14	520.0	1.25		1	42.5	66.25	0.64		0.00	1.90
019	Revelstoke	11	292.5	0.87		5	152.5	66.49	2.29		0.16	4.43
020	Salmon Arm	90	3,075.0	2.01	*	12	410.0	250.42	1.64		0.64	2.64
021	Armstrong - Spallumcheen	23	702.5	1.52		6	260.0	71.63	3.63		0.64	6.62
022	Vernon	128	3,950.0	1.29	*	28	720.0	492.28	1.46		0.82	2.11
023	Central Okanagan	292	9,148.5	1.05		44	1,245.0	1,465.65	0.85		0.57	1.13
024	Kamloops	239	6,977.5	1.23	*	37	1,052.5	901.19	1.17		0.74	1.60
025	100 Mile House	48	1,330.0	1.91	*	10	280.0	109.55	2.56		0.75	4.36
026	North Thompson	17	732.5	3.37	*	1	12.5	32.33	0.39		0.00	1.14
027	Cariboo - Chilcotin	94	2,935.0	2.02	*	23	697.5	220.52	3.16	*	1.67	4.66
028	Quesnel	53	1,517.5	1.24		6	195.0	187.62	1.04		0.16	1.92
029	Lillooet	20	535.0	2.35	*	-	-	35.24	-		-	-
030	South Cariboo	26	695.0	2.02	*	5	142.5	55.06	2.59		0.18	5.00
031	Merritt	40	1,095.0	1.89	*	6	150.0	90.99	1.65		0.02	3.27
032	Hope	36	1,060.0	2.78	*	-	-	59.97	-		-	-
033	Chilliwack	142	4,505.0	1.11		22	695.0	656.39	1.06		0.56	1.56
034	Abbotsford	223	7,849.0	1.08		34	1,285.0	1,143.41	1.12		0.72	1.52
035	Langley	179	5,762.5	0.86		32	950.0	1,058.94	0.90		0.55	1.24
037	Delta	106	3,319.5	0.62	*	17	627.5	802.25	0.78		0.39	1.18
038	Richmond	147	4,739.0	0.46	*	15	402.5	1,654.51	0.24	*	0.10	0.38
040	New Westminster	126	3,800.0	1.07		11	252.5	582.27	0.43	*	0.13	0.74
041	Burnaby	243	7,477.5	0.61	*	40	1,155.0	1,968.28	0.59	*	0.38	0.80
042	Maple Ridge	150	5,174.5	1.06		25	817.5	781.91	1.05		0.61	1.48
043	Coquitlam	248	7,859.5	0.66	*	31	932.5	1,887.66	0.49	*	0.30	0.68
044	North Vancouver	137	4,549.0	0.62	*	27	722.5	1,144.23	0.63	*	0.36	0.91
045	West Vancouver-Bowen Is.	47	1,357.0	0.58	*	9	272.5	360.46	0.76		0.21	1.31
046	Sunshine Coast	51	1,572.0	1.23		7	137.5	207.53	0.66		0.00	1.34
047	Powell River	45	1,282.5	1.40		10	340.0	144.83	2.35		0.75	3.94
048	Howe Sound	77	2,849.5	1.36	*	16	510.0	334.82	1.52		0.69	2.36
049	Bella Coola Valley	16	595.0	3.73	*	1	32.5	22.72	1.43		0.00	4.23
050	Queen Charlotte	14	390.0	1.47		1	7.5	38.72	0.19	+	0.00	0.57
051	Snow Country	2	100.0	3.30		-	-	3.80	-		-	-
052	Prince Rupert	29	857.5	1.08		5	202.5	115.43	1.75		0.14	3.37
053	Upper Skeena	11	367.5	1.24		3	127.5	44.42	2.87		0.00	6.63
054	Smithers	41	1,359.5	1.53		9	312.5	130.97	2.39		0.71	4.06
055	Burns Lake	22	735.0	1.74		2	50.0	64.77	0.77		0.00	2.08
056	Nechako	51	1,782.5	2.14	*	3	117.5	120.91	0.97		0.00	2.10
057	Prince George	203	6,449.0	1.17		39	1,287.5	825.05	1.56	*	1.01	2.11
059	Peace River South	45	1,537.5	1.05		10	320.0	227.31	1.41		0.48	2.34
060	Peace River North	81	3,215.5	1.61	*	11	387.5	312.35	1.24		0.44	2.04
061	Greater Victoria	367	11,269.5	0.94		64	1,730.0	1,860.24	0.93		0.67	1.19
062	Sooke	89	2,822.5	0.83		18	555.0	566.09	0.98		0.45	1.51
063	Saanich	77	2,312.5	0.81		14	470.0	438.46	1.07		0.43	1.71
064	Gulf Islands	23	647.5	1.03		8	225.0	104.80	2.15		0.54	3.75
065	Cowichan	114	3,777.0	1.38	*	22	719.5	431.16	1.67		0.89	2.45
066	Lake Cowichan	8	255.0	0.82		3	82.5	50.47	1.63		0.00	3.84
067	Ladysmith	27	992.5	1.22		15	512.5	128.87	3.98	*	1.71	6.25
068	Nanaimo	169	5,576.0	1.10		23	752.5	807.69	0.93		0.53	1.33
069	Qualicum	68	2,130.0	1.20		9	202.5	289.58	0.70		0.08	1.31
070	Alberni	93	2,997.0	1.87	*	18	540.0	246.01	2.20	*	1.05	3.34
071	Courtenay	112	3,317.0	1.12		19	422.5	473.69	0.89		0.41	1.37
072	Campbell River	123	3,682.5	1.73	*	13	327.5	330.62	0.99		0.39	1.59
075	Mission	88	2,985.0	1.30	*	11	292.5	364.30	0.80		0.26	1.35
076	Agassiz - Harrison	24	990.0	2.29	*	4	115.0	67.31	1.71		0.00	3.70
077	Summerland	17	602.5	1.21		-	-	77.57	-		-	-
078	Enderby	22	690.0	1.91	*	2	105.0	56.10	1.87		0.00	4.51
080	Kitimat	18	455.0	0.77		7	217.5	86.54	2.51		0.40	4.63
081	Fort Nelson	17	667.5	1.65		2	95.0	57.14	1.66		0.00	3.97
083	Central Coast	4	165.0	1.87		2	55.0	12.37	4.44		0.00	10.71
084	Vancouver Island West	9	242.5	1.95		1	37.5	19.29	1.94		0.00	5.75
085	Vancouver Island North	50	1,747.0	2.50	*	8	220.0	102.35	2.15		0.56	3.73
087	Stikine	4	110.0	2.02		1	7.5	8.06	0.93		0.00	2.75
088	Terrace	46	1,607.0	1.48	*	5	157.5	164.79	0.96		0.10	1.81
092	Nisga'a	12	470.0	4.29	*	3	157.5	15.86	9.93		0.00	21.20
094	Telegraph Creek	6	270.0	6.70	*	1	57.5	6.10	9.42		0.00	27.90
161	Vancouver - City Centre	193	5,777.5	0.74	*	51	1,362.5	1,290.38	1.06		0.73	1.38
162	Vancouver - Downtown E.side	298	8,725.0	2.39	*	58	1,525.0	635.08	2.40	*	1.71	3.09
163	Vancouver - North East	117	3,827.5	0.66	*	25	752.5	911.11	0.83		0.46	1.19
164	Vancouver - Westside	120	3,350.0	0.45	*	19	527.5	1,172.41	0.45	*	0.22	0.68
165	Vancouver - Midtown	113	3,512.0	0.69	*	20	627.0	795.63	0.79		0.40	1.18
166	Vancouver - South	132	4,329.5	0.58	*	22	712.0	1,129.33	0.63	*	0.32	0.94
201	Surrey	584	18,965.5	0.93		99	3,354.0	3,266.11	1.03		0.80	1.25
202	South Surrey/White Rock	85	2,957.0	0.80	*	19	637.5	590.04	1.08		0.55	1.61
	PROVINCIAL TOTAL	**7,351**	**233,339.5**	**1.00**		**1,231**	**36,962.5**	**36,962.50**	**1.00**		**0.94**	**1.06**

Notes for this table follow the map.

FIGURE 41

EXTERNAL CAUSES OF DEATH BY LOCAL HEALTH AREA

BRITISH COLUMBIA, 2004–2008


QUINTILE (PYLLI)
5 (>2.01)
4 (1.59-2.01)
3 (1.23-1.59)
3 (1.00-1.23)
1 (<1.00)
Statistically Significant
N
0
100
200
300 kms
see inset 1
Inset 2
0
see inset 2
Inset 1
0
50 kms

Notes to Table 36

PYLL - denotes the total number of years of life lost from an established life expectancy (75 years).

PYLLSR - PYLL Standardized Rate per 1,000 standard population (Canada 1991 Census).

* Statistical testing indicates that observed deaths are significantly different from the expected deaths ($p<0.05$, two tailed).

+ Denotes significance based on less than five deaths.

Total includes residents with unknown LHA.

Note: PYLLI - Potential Years of Life Lost Index. Refer to Figure 1 to clarify geographical location of LHAs.

Medically Treatable Diseases

A list of causes has been identified where death could potentially have been avoided through appropriate and timely medical intervention and treatment. It should be noted that the causes are considered to have been amenable to medical treatment only if the death occurred to persons within specific age ranges. Please see the footnote on Table 37 for a list of the causes and ages included in this category.

There were only 164 deaths due to these causes in 2009, which represents 0.5 percent of all deaths in the province.

Table 37 indicates the number and percent of all Medically Treatable Disease (MTD) deaths by cause for 2009 and the five-year period 2004-2008. Bacterial infections accounted for most of the deaths due to MTDs in 2009 and the previous five years. In 2009, two cause categories, hypertension and hypertensive diseases, and pneumonia and unqualified bronchitis, accounted for 46.6 percent male deaths due to MTDs and for females, about 30.3 percent.

Table 38 shows the count of deaths due to MTDs organized by the LHA in which the decedent lived. For the current year (2009) the table shows the actual number of deaths observed in the LHA and the expected deaths (calculated using the 2009 age-specific death rates for MTD).

There were 12 LHAs that had no deaths due to these conditions in 2004-2008 and 39 in 2009 as shown in Table 38. Further, there were only 8 LHAs in 2004-2008 that showed differences between observed and expected deaths that were statistically significant based on five or more deaths, and only 1 LHA with five or more deaths had statistically significant and high ratios in 2009.

Figure 42 shows the province divided up into its eighty-nine LHAs, with each area indicated as to whether its SMR for deaths due to MTDs was high or low on a five category scale: deep blue indicates the highest SMRs and dark grey indicates the lowest. As might be expected from a table containing such low counts, this map shows no obvious geographic pattern of location of the quintiles.

TABLE 37

DEATHS DUE TO MEDICALLY TREATABLE DISEASES BY SELECTED CAUSES AND GENDER

BRITISH COLUMBIA, 2004–2008 AND 2009

Cause of Death	ICD-10 Code(s)	2004–2008		2009					
				Male		Female		Total	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Bacterial Infections	A00-A05, ..., M871	281	33.7	25	28.4	21	27.6	46	28.0
Pneumonia and unqualified bronchitis	J12-J181, J188, J189, J40	173	20.7	18	20.5	14	18.4	32	19.5
Hypertension and hypertensive diseases	I10-I15	142	17.0	23	26.1	9	11.8	32	19.5
Malignant neoplasm of cervix	C53	137	16.4	-	-	20	26.3	20	12.2
Abdominal hernias, cholecystitis and cholelithiasis, appendicitis	K35-K37, K40-K46, K80, K81	35	4.2	5	5.7	3	3.9	8	4.9
Asthma	J45-J46	28	3.4	2	2.3	1	1.3	3	1.8
Tuberculosis	A15-A19, B90	19	2.3	4	4.5	1	1.3	5	3.0
Hodgkin's disease	C81	7	0.8	1	1.1	-	-	1	0.6
Chronic rheumatic heart disease	I05-I09	7	0.8	-	-	1	1.3	1	0.6
Acute respiratory infections and influenza	J00-J06, J09-J11, J20-22	5	0.6	10	11.4	6	7.9	16	9.8
Nutritional anemias	D50-D53	-	-	-	-	-	-	-	-
TOTAL		**834**	**100.0**	**88**	**100.0**	**76**	**100.0**	**164**	**100.0**

Note: Medically Treatable Diseases (MTDs) based on Charlton's definition (see Glossary).
*ICD–10 codes A00–A05, A20–A49, B95–B96, G00, H66, H70, H95.0–H95.1, I00–I01, I02.0, I02.9, L01–L08, M00, M02.8–M02.9, M46.2, M86, M87.1.
Deaths due to MTDs exclude all deaths less than age 5 years old.
Deaths due to MTDs also exclude
- deaths aged 65 or more from hypertensive disease.
- deaths aged 50 or more from pneumonia and unqualified bronchitis.
- deaths aged 65 or more from cervical cancer.
- deaths aged 65 or more from tuberculosis.
- deaths aged 50 or more from asthma.
- deaths aged 45 or more from chronic rheumatic heart disease.
- deaths aged 50 or more from acute respiratory infections and influenza.
- deaths aged 65 or more from bacterial infections.
- deaths aged 35 or more from Hodgkin's disease.
- deaths aged 65 or more from abdominal hernias, cholecystitis and cholelithiasis, appendicitis.
- deaths aged 65 or more from deficiency nutritional anemias.

Total percentage may not add up to 100 due to rounding.
The output from ICD-10 mortality coding and underlying cause of death selection was modified in BC to reflect the intent of certifiers in this jurisdiction and to provide greater continuity over time. Data using the standard ICD-10 rules for such categories as pneumonia/influenza, diabetes, or cancer should not be compared to the numbers shown above.

Table 38

STANDARDIZED MORTALITY RATIO BY LOCAL HEALTH AREA DEATHS DUE TO MEDICALLY TREATABLE DISEASES, BRITISH COLUMBIA, 2004–2008 AND 2009

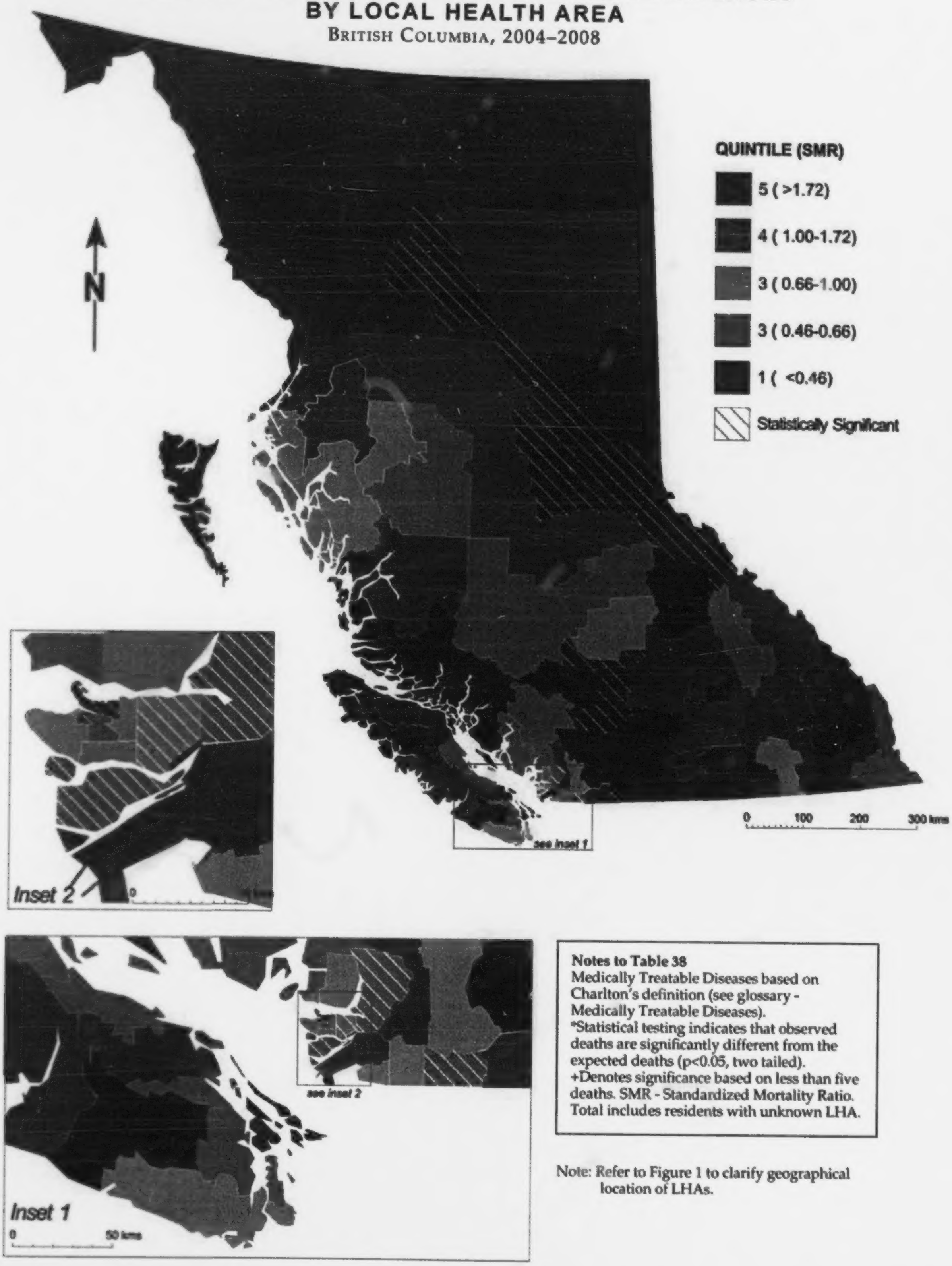
		2004–2008			2009						
									95% Confidence Interval		
Local Health Area		Observed Deaths	SMR	(p)	Observed Deaths	Expected Deaths	SMR	(p)	Lower		Upper
001	Fernie	2	0.65		-	0.59	-		-	-	-
002	Cranbrook	2	0.40		1	0.97	1.03		0.01	-	5.72
003	Kimberley	3	1.72		-	0.34	-		-	-	-
004	Windermere	-	-		-	0.42	-		-	-	-
005	Creston	6	2.52		-	0.45	-		-	-	-
006	Kootenay Lake	-	-		-	0.16	-		-	-	-
007	Nelson	5	1.00		-	0.98	-		-	-	-
009	Castlegar	6	2.28		1	0.51	1.97		0.03	-	10.94
010	Arrow Lakes	-	-		-	0.20	-		-	-	-
011	Trail	5	1.29		1	0.73	1.38		0.02	-	7.66
012	Grand Forks	-	-		-	0.34	-		-	-	-
013	Kettle Valley	-	-		-	0.16	-		-	-	-
014	Southern Okanagan	6	1.58		1	0.74	1.38		0.02	-	7.54
015	Penticton	9	1.18		3	1.51	1.99		0.40	-	5.82
016	Keremeos	-	-		-	0.20	-		-	-	-
017	Princeton	2	1.76		1	0.21	4.72		0.06	-	26.26
018	Golden	2	1.40		-	0.29	-		-	-	-
019	Revelstoke	1	0.62		1	0.31	3.25		0.04	-	18.10
020	Salmon Arm	11	1.62		-	1.36	-		-	-	-
021	Armstrong - Spallumcheen	-	-		-	0.35	-		-	-	-
022	Vernon	14	1.13		3	2.48	1.21		0.24	-	3.53
023	Central Okanagan	35	1.08		6	6.75	0.89		0.32	-	1.93
024	Kamloops	29	1.36		5	4.13	1.21		0.39	-	2.83
025	100 Mile House	3	0.92		-	0.60	-		-	-	-
026	North Thompson	2	2.15		-	0.17	-		-	-	-
027	Cariboo - Chilcotin	3	0.58		1	1.01	0.99		0.01	-	5.49
028	Quesnel	5	1.06		1	0.90	1.11		0.01	-	6.17
029	Lillooet	3	3.43		-	0.16	-		-	-	-
030	South Cariboo	6	3.91	*	-	0.28	-		-	-	-
031	Merritt	4	1.75		-	0.43	-		-	-	-
032	Hope	5	3.02		-	0.30	-		-	-	-
033	Chilliwack	20	1.40		3	2.89	1.04		0.21	-	3.04
034	Abbotsford	13	0.57	*	9	4.52	1.99		0.91	-	3.78
035	Langley	21	0.89		9	4.57	1.97		0.90	-	3.74
037	Delta	25	1.23		5	3.75	1.33		0.43	-	3.11
038	Richmond	17	0.46	*	2	7.19	0.28		0.03	-	1.00
040	New Westminster	14	1.14		1	2.48	0.40		0.01	-	2.24
041	Burnaby	27	0.67	*	4	7.99	0.50		0.13	-	1.28
042	Maple Ridge	17	1.00		6	3.44	1.74		0.64	-	3.80
043	Coquitlam	25	0.61	*	3	8.23	0.36		0.07	-	1.07
044	North Vancouver	18	0.66		3	5.29	0.57		0.11	-	1.66
045	West Vancouver-Bowen Is.	6	0.58		2	1.95	1.03		0.12	-	3.70
046	Sunshine Coast	4	0.64		1	1.25	0.80		0.01	-	4.44
047	Powell River	8	1.91		1	0.78	1.28		0.02	-	7.10
048	Howe Sound	4	0.65		1	1.27	0.79		0.01	-	4.39
049	Bella Coola Valley	1	1.71		-	0.11	-		-	-	-
050	Queen Charlotte	2	1.95		-	0.19	-		-	-	-
051	Snow Country	-	-		-	0.02	-		-	-	-
052	Prince Rupert	2	0.69		1	0.54	1.86		0.02	-	10.38
053	Upper Skeena	1	1.00		-	0.19	-		-	-	-
054	Smithers	3	0.96		-	0.58	-		-	-	-
055	Burns Lake	1	0.66		-	0.29	-		-	-	-
056	Nechako	3	1.04		1	0.52	1.91		0.03	-	10.64
057	Prince George	33	1.74	*	4	3.58	1.12		0.30	-	2.86
059	Peace River South	9	1.77		1	0.99	1.01		0.01	-	5.64
060	Peace River North	6	1.06		-	1.15	-		-	-	-
061	Greater Victoria	39	0.94		10	8.04	1.24		0.60	-	2.29
062	Sooke	10	0.60		4	2.60	1.54		0.41	-	3.94
063	Saanich	7	0.54		-	2.46	-		-	-	-
064	Gulf Islands	-	-		-	0.69	-		-	-	-
065	Cowichan	6	0.55		2	2.12	0.95		0.11	-	3.41
066	Lake Cowichan	4	3.07		-	0.26	-		-	-	-
067	Ladysmith	2	0.53		2	0.75	2.66		0.30	-	9.59
068	Nanaimo	22	1.12		7	3.87	1.81		0.72	-	3.73
069	Qualicum	5	0.54		-	1.81	-		-	-	-
070	Alberni	7	1.10		3	1.18	2.54		0.51	-	7.43
071	Courtenay	8	0.63		1	2.51	0.40		0.01	-	2.22
072	Campbell River	4	0.46		2	1.64	1.22		0.14	-	4.39
075	Mission	6	0.78		1	1.53	0.65		0.01	-	3.64
076	Agassiz - Harrison	3	1.78		-	0.32	-		-	-	-
077	Summerland	-	-		-	0.44	-		-	-	-
078	Enderby	3	1.99		1	0.29	3.50		0.05	-	19.46
080	Kitimat	2	0.91		1	0.40	2.49		0.03	-	13.83
081	Fort Nelson	3	2.67		-	0.21	-		-	-	-
083	Central Coast	2	7.61		-	0.05	-		-	-	-
084	Vancouver Island West	1	1.83		-	0.11	-		-	-	-
085	Vancouver Island North	5	1.88		-	0.48	-		-	-	-
087	Stikine	-	-		-	0.04	-		-	-	-
088	Terrace	6	1.52		1	0.74	1.35		0.02	-	7.49
092	Nisga'a	-	-		-	0.07	-		-	-	-
094	Telegraph Creek	1	8.66		-	0.02	-		-	-	-
161	Vancouver - City Centre	35	1.58	*	5	4.30	1.16		0.37	-	2.71
162	Vancouver - Downtown E.side	58	4.94	*	8	2.59	3.09	*	1.33	-	6.08
163	Vancouver - North East	14	0.76		4	3.73	1.07		0.29	-	2.74
164	Vancouver - Westside	17	0.68		3	4.75	0.63		0.13	-	1.85
165	Vancouver - Midtown	10	0.63		4	3.23	1.24		0.33	-	3.17
166	Vancouver - South	19	0.77		5	4.84	1.03		0.33	-	2.41
201	Surrey	70	1.08		17	13.03	1.30		0.78	-	2.09
202	South Surrey/White Rock	13	0.81		1	3.10	0.32		0.00	-	1.79
	PROVINCIAL TOTAL	834	1.00		164	164.00	1.00		0.86	-	1.17

Notes for this table follow the map.

FIGURE 42

DEATHS DUE TO MEDICALLY TREATABLE DISEASES BY LOCAL HEALTH AREA

BRITISH COLUMBIA, 2004–2008


N
QUINTILE (SMR)
5 (>1.72)
4 (1.00-1.72)
3 (0.66-1.00)
3 (0.46-0.66)
1 (<0.46)
Statistically Significant
0 100 200 300 kms
see inset 1
Inset 2
0
see inset 2
Inset 1
0 50 kms

Notes to Table 38
Medically Treatable Diseases based on Charlton's definition (see glossary - Medically Treatable Diseases).
*Statistical testing indicates that observed deaths are significantly different from the expected deaths ($p<0.05$, two tailed).
+Denotes significance based on less than five deaths. SMR - Standardized Mortality Ratio. Total includes residents with unknown LHA.

Note: Refer to Figure 1 to clarify geographical location of LHAs.

Alcohol-Related Deaths

Alcohol-related deaths provide information on deaths due to alcohol (directly related) as well as those where alcohol was a contributing factor (indirectly related). Alcohol-related and drug overdose deaths are the only cause of death categories in this publication that are not based entirely upon the underlying causes of death. See the Glossary for a further explanation of alcohol-related deaths and Table 39 for the list of causes used for deaths directly due to alcohol.

Table 39 shows the number and percent of deaths that were directly and indirectly related to alcohol in 2009 and in the five preceding years, while Figure 43 graphically shows the pattern of alcohol-related deaths by cause. About 22.1 percent of the 1,755 deaths related to alcohol in 2009 were directly attributable to alcohol (387 deaths). Alcohol was a contributing factor in the remaining 77.9 percent of these deaths. The table indicates that most of the deaths directly attributable to alcohol were caused by liver disease (14.3 percent) in 2009.

Table 40 shows numbers and percentages of alcohol-related deaths by age group for males, females, and the total population. All alcohol-related deaths, whether directly or indirectly related to alcohol, are included in this table.

Alcohol-related deaths constitute 5.6 percent of all deaths in 2009 and 8.3 percent of all male deaths. Males died of such causes nearly 3 times more frequently than women in 2009.

Alcohol-related deaths for seniors (65 or older) accounted for 42.6 percent of deaths; 43.6 percent were people between the ages of 45 and 64.

The numbers of deaths directly and indirectly related to alcohol are shown for the LHAs in Table 41.

There were 17 LHAs with at least five deaths where the observed values were statistically significant and above the expected values in both 2004-2008 and 2009 as shown in Table 41. There were 11 LHAs with SMRs that were statistically significant and low in both time periods. The map in Figure 44 shows the SMR quintiles and statistical significance patterns in each LHA during 2004-2008.

Reports of alcohol-related deaths in 2009 are lower than in previous years. Many alcohol related deaths are referred to the BC Coroner Service for investigation. As with external causes of death, the medical coding will be incomplete until the coroner closes the investigation. For this reason the counts are often lower in the current year and are adjusted upwards in later annual reports.

TABLE 39

ALCOHOL-RELATED DEATHS BY CAUSE

BRITISH COLUMBIA, 2004–2008 AND 2009

		Year of Death			
		2004–2008		2009	
Cause of Death	ICD-10 Code(s)	Number	Percent	Number	Percent
Directly Related to Alcohol					
Alcohol intoxication	F100	179	1.8	17	1.0
Alcoholic psychoses and dependence	F101-F109	526	5.2	72	4.1
Alcoholic neurological disorders	G312, G621, G721	-	-	-	-
Alcoholic cardiomyopathy	I426	89	0.9	22	1.3
Alcoholic gastritis	K292	12	0.1	3	0.2
Alcoholic liver disease	K70	1,136	11.2	251	14.3
Alcohol induced chronic pancreatitis	K860	11	0.1	1	0.1
Alcohol poisoning	X45, X65	95	0.9	21	1.2
Other alcohol causes	E244, O354, O993, P043, Q860, R780, T510-T512, T519	-	-	-	-
SUBTOTAL		2,048	20.1	387	22.1
Indirectly Related to Alcohol[1]					
Certain infectious and parasitic diseases	A00-B99	330	3.2	50	2.8
Neoplasms	C00-D48	1,182	11.6	232	13.2
Endocrine/Nutritional/Metabolic	E00-E243, E248-E89	283	2.8	52	3.0
Mental disorders	F00-F09, F11-F99	131	1.3	21	1.2
Neurological diseases G620, G622-G720, G722-G99	G00-G311, G318-	117	1.1	17	1.0
Circulatory	I00-I425, I427-I99	2,063	20.3	319	18.2
Diseases of the respiratory system	J00-J98	682	6.7	143	8.1
Digestive system diseases	K00-K291, K293-K69, K71-K85, K861-K92	576	5.7	75	4.3
Urinary system diseases	N00-N39, N990, N991, N995	94	0.9	12	0.7
Unintentional injury	V01-X44, X46-X59, Y40-Y86, Y88	1,634	16.0	212	12.1
Suicide	X60-X64, X66-X84, Y87	511	5.0	94	5.4
Homicide	X85-Y09, Y871	52	0.5	4	0.2
All other causes		481	4.7	137	7.8
SUBTOTAL		8,136	79.9	1,368	77.9
TOTAL		10,184	100.0	1,755	100.0

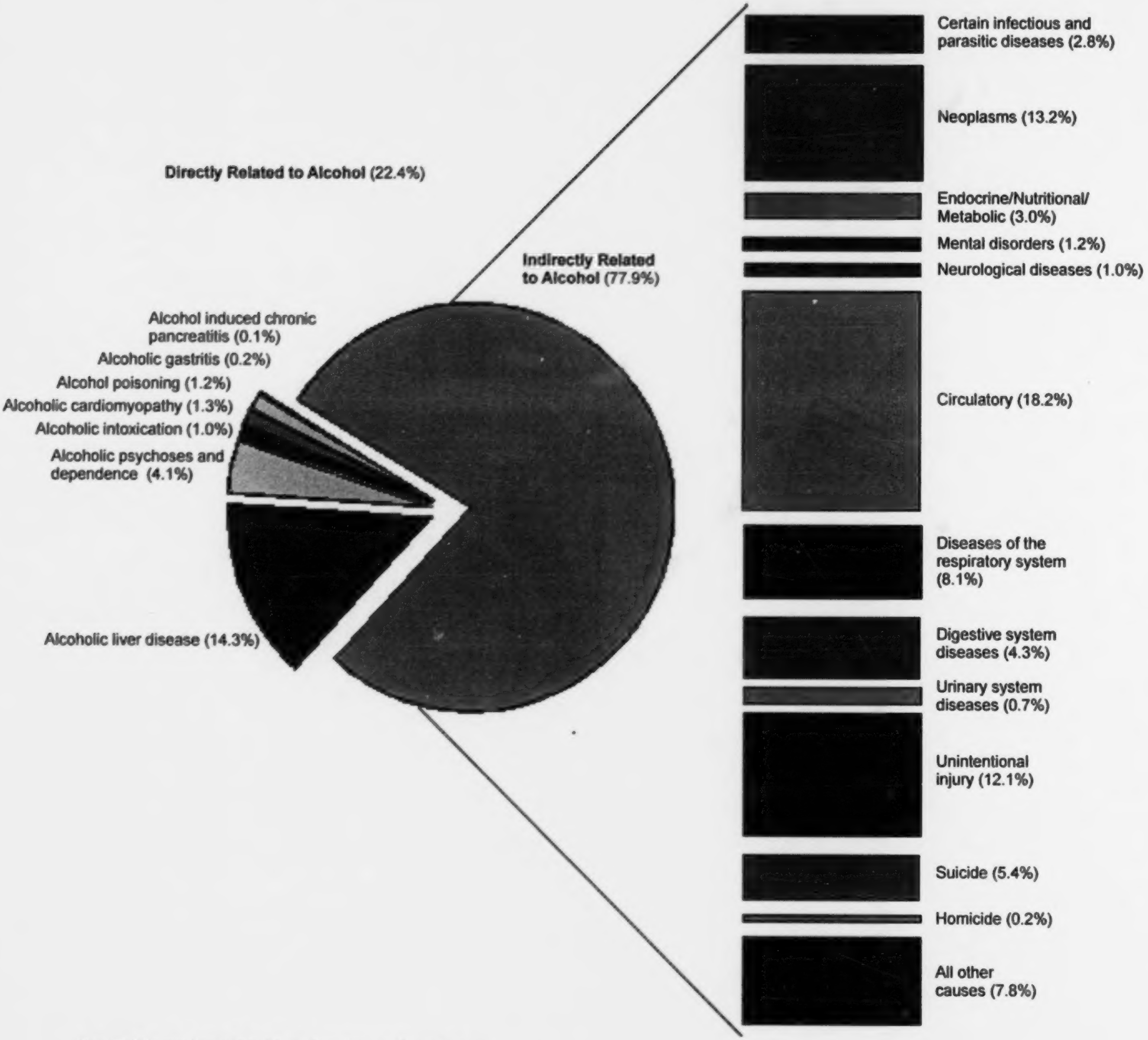
Note: [1] ICD-10 codes for indirectly related to alcohol exclude the codes for directly related to alcohol and will not match the list of codes used for these categories in other tables.

Total percentage may not add up to 100 due to rounding. Non-residents are excluded.

Coding practices from 1995 to 1999 may have produced over-counting of alcohol-related mortality. With the introduction of ICD-10 in 2000, more specific codes are available. Currently produced data should not be used in combination with data produced prior to 2000. The output from ICD-10 mortality coding and underlying cause of death selection was modified in BC to reflect the intent of certifiers in this jurisdiction and to provide greater continuity over time. Data using the standard ICD-10 rules for such categories as pneumonia/influenza, diabetes, or cancer should not be compared to the numbers shown above.

In 2008, the BC Coroners Service and BC Vital Statistics Agency engaged in a retrospective review of death registrations of alcohol-related fatalities. As a result of the project, a number of registrations were ammended and are reflected in this report.

FIGURE 43
ALCOHOL-RELATED DEATHS BY CAUSE
BRITISH COLUMBIA, 2009



See Table 39 for ICD-10 codes for each category.

TABLE 40

ALCOHOL-RELATED DEATHS BY AGE AND GENDER

BRITISH COLUMBIA, 2009

Age	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
<15	-	-	-	-	-	-
15-19	15	1.1	3	0.7	18	1.0
20-24	22	1.7	8	1.8	30	1.7
25-44	143	10.8	51	11.8	194	11.1
45-64	580	43.9	185	42.7	765	43.6
65-84	485	36.7	130	30.0	615	35.0
85+	77	5.8	56	12.9	133	7.6
TOTAL	**1,322**	**100.0**	**433**	**100.0**	**1,755**	**100.0**

Note: Alcohol-related deaths – see Table 39 for ICD-10 codes and Glossary for more details.
Total percentage may not add up to 100 due to rounding. Non-residents are excluded.
Coding practices from 1995 to 1999 may have produced over-counting of alcohol-related mortality.
With the introduction of ICD-10 in 2000, more specific codes are available.
Currently produced data should not be used in combination with data produced prior to 2000.

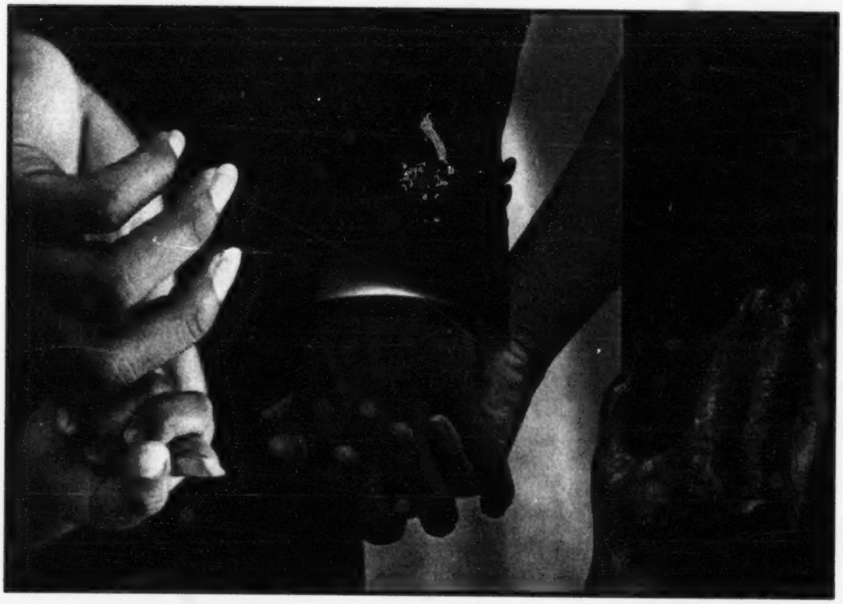


Table 41

STANDARDIZED MORTALITY RATIO BY LOCAL HEALTH AREA ALCOHOL-RELATED DEATHS,
BRITISH COLUMBIA, 2004–2008 AND 2009

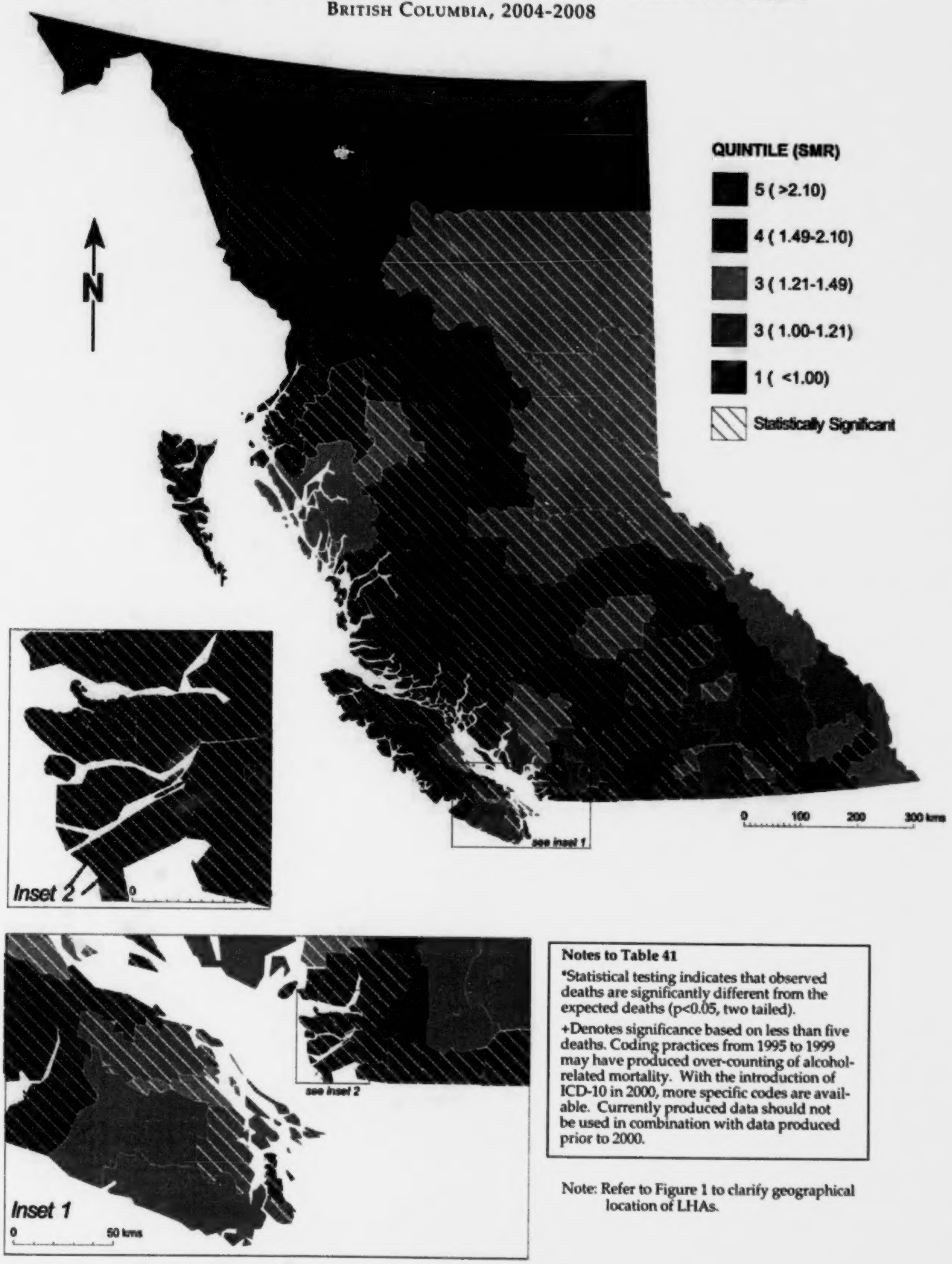
		2004–2008			2009						
Local Health Area		Observed Deaths	SMR	(p)	Observed Deaths	Expected Deaths	SMR	(p)	95% Confidence Interval Lower		Upper
001	Fernie	43	1.28		6	5.78	1.04		0.38	-	2.26
002	Cranbrook	97	1.56	*	10	10.76	0.93		0.44	-	1.71
003	Kimberley	30	1.25		8	4.09	1.96		0.84	-	3.85
004	Windermere	29	1.17		3	4.36	0.69		0.14	-	2.01
005	Creston	36	0.93		13	6.52	1.99	*	1.06	-	3.41
006	Kootenay Lake	11	1.00		2	1.89	1.06		0.12	-	3.82
007	Nelson	97	1.61	*	17	10.41	1.63		0.95	-	2.62
009	Castlegar	49	1.45	*	10	5.83	1.72		0.82	-	3.16
010	Arrow Lakes	31	2.11	*	2	2.48	0.81		0.09	-	2.91
011	Trail	103	1.94	*	17	8.97	1.90	*	1.10	-	3.03
012	Grand Forks	43	1.54	*	7	4.71	1.48		0.59	-	3.06
013	Kettle Valley	12	1.05		3	2.00	1.50		0.30	-	4.37
014	Southern Okanagan	112	1.63	*	17	11.58	1.47		0.85	-	2.35
015	Penticton	157	1.25	*	28	21.21	1.32		0.88	-	1.91
016	Keremeos	32	1.80	*	6	3.04	1.98		0.72	-	4.30
017	Princeton	12	0.70		3	2.97	1.01		0.20	-	2.95
018	Golden	19	1.21		2	2.72	0.74		0.08	-	2.66
019	Revelstoke	16	0.85		6	3.16	1.90		0.69	-	4.14
020	Salmon Arm	111	1.12		23	17.32	1.33		0.84	-	1.99
021	Armstrong - Spallumcheen	19	0.75		4	4.44	0.90		0.24	-	2.31
022	Vernon	181	1.06		31	29.87	1.04		0.70	-	1.47
023	Central Okanagan	457	1.01		80	78.96	1.01		0.80	-	1.26
024	Kamloops	308	1.17	*	45	45.44	0.99		0.72	-	1.33
025	100 Mile House	58	1.34	*	5	7.36	0.68		0.22	-	1.59
026	North Thompson	24	2.15	*	2	1.91	1.05		0.12	-	3.77
027	Cariboo - Chilcotin	121	2.00	*	37	10.38	3.57	*	2.51	-	4.92
028	Quesnel	83	1.48	*	7	9.65	0.73		0.29	-	1.49
029	Lillooet	36	3.38	*	8	1.82	4.39	*	1.89	-	8.65
030	South Cariboo	55	2.63	*	9	3.57	2.52	*	1.15	-	4.78
031	Merritt	58	2.00	*	12	4.92	2.44	*	1.26	-	4.26
032	Hope	47	1.96	*	7	3.99	1.76		0.70	-	3.62
033	Chilliwack	162	0.85	*	38	33.26	1.14		0.81	-	1.57
034	Abbotsford	215	0.76	*	37	47.89	0.77		0.54	-	1.06
035	Langley	223	0.82	*	39	48.51	0.80		0.57	-	1.10
037	Delta	159	0.68	*	25	40.51	0.62	*	0.40	-	0.91
038	Richmond	165	0.39	*	29	72.36	0.40	*	0.27	-	0.58
040	New Westminster	193	1.37	*	35	24.08	1.45	*	1.01	-	2.02
041	Burnaby	361	0.75	*	66	81.81	0.81		0.62	-	1.03
042	Maple Ridge	173	0.94		18	32.03	0.56	*	0.33	-	0.89
043	Coquitlam	268	0.64	*	42	73.96	0.57	*	0.41	-	0.77
044	North Vancouver	178	0.57	*	29	53.17	0.55	*	0.37	-	0.78
045	West Vancouver-Bowen Is.	77	0.51	*	13	25.01	0.52	*	0.28	-	0.89
046	Sunshine Coast	89	1.04		14	15.27	0.92		0.50	-	1.54
047	Powell River	91	1.58	*	20	9.84	2.03	*	1.24	-	3.14
048	Howe Sound	75	1.29	*	15	10.35	1.45		0.81	-	2.39
049	Bella Coola Valley	31	4.59	*	7	1.12	6.28	*	2.51	-	12.93
050	Queen Charlotte	37	3.48	*	7	1.81	3.86	*	1.55	-	7.95
051	Snow Country	3	2.11		-	0.20	-		-	-	-
052	Prince Rupert	72	2.30	*	14	5.22	2.68	*	1.46	-	4.50
053	Upper Skeena	23	2.10	*	1	1.84	0.54		0.01	-	3.03
054	Smithers	46	1.40	*	8	5.67	1.41		0.61	-	2.78
055	Burns Lake	34	1.90	*	6	2.99	2.01		0.73	-	4.37
056	Nechako	70	2.17	*	12	5.46	2.20	*	1.14	-	3.84
057	Prince George	278	1.40	*	58	33.93	1.71	*	1.30	-	2.21
059	Peace River South	84	1.48	*	12	9.62	1.25		0.64	-	2.18
060	Peace River North	75	1.32	*	13	9.74	1.34		0.71	-	2.28
061	Greater Victoria	670	1.20	*	110	92.10	1.19		0.98	-	1.44
062	Sooke	137	1.03		29	23.88	1.21		0.81	-	1.74
063	Saanich	142	0.71	*	25	33.89	0.74		0.48	-	1.09
064	Gulf Islands	58	1.12		14	9.02	1.55		0.85	-	2.61
065	Cowichan	173	1.20	*	29	24.93	1.16		0.78	-	1.67
066	Lake Cowichan	19	1.15		5	2.87	1.74		0.56	-	4.06
067	Ladysmith	76	1.41	*	11	9.54	1.15		0.57	-	2.06
068	Nanaimo	310	1.18	*	47	45.49	1.03		0.76	-	1.37
069	Qualicum	128	0.83	*	29	27.07	1.07		0.72	-	1.54
070	Alberni	175	2.15	*	39	13.87	2.81	*	2.00	-	3.84
071	Courtenay	227	1.37	*	42	29.62	1.42	*	1.02	-	1.92
072	Campbell River	149	1.49	*	31	17.63	1.76	*	1.19	-	2.50
075	Mission	90	1.05		10	14.69	0.68		0.33	-	1.25
076	Agassiz - Harrison	25	1.06		3	3.97	0.76		0.15	-	2.21
077	Summerland	18	0.48	*	8	6.27	1.28		0.55	-	2.51
078	Enderby	31	1.47	*	5	3.63	1.38		0.44	-	3.21
080	Kitimat	30	1.26		4	4.02	1.00		0.27	-	2.55
081	Fort Nelson	15	1.56		-	1.56	-		-	-	-
083	Central Coast	22	7.82	*	2	0.44	4.51		0.51	-	16.28
084	Vancouver Island West	10	1.63		2	1.03	1.94		0.22	-	7.00
085	Vancouver Island North	86	3.19	*	6	4.59	1.31		0.48	-	2.84
087	Stikine	6	2.37		5	0.41	12.22	*	3.94	-	28.52
088	Terrace	77	1.80	*	15	7.34	2.04	*	1.14	-	3.37
092	Nisga'a	12	3.19	*	4	0.65	6.13	+	1.65	-	15.68
094	Telegraph Creek	6	4.82	*	1	0.19	5.22		0.07	-	29.03
161	Vancouver - City Centre	196	0.83	*	39	39.95	0.98		0.69	-	1.33
162	Vancouver - Downtown E.side	339	2.35	*	50	25.53	1.96	*	1.45	-	2.58
163	Vancouver - North East	126	0.55	*	18	38.69	0.47	*	0.28	-	0.74
164	Vancouver - Westside	135	0.47	*	17	47.22	0.36	*	0.21	-	0.58
165	Vancouver - Midtown	144	0.81	*	19	30.11	0.63	*	0.38	-	0.99
166	Vancouver - South	156	0.51	*	29	50.94	0.57	*	0.38	-	0.82
201	Surrey	575	0.84	*	90	124.34	0.72	*	0.58	-	0.89
202	South Surrey/White Rock	138	0.59	*	26	41.73	0.62	*	0.41	-	0.91
	PROVINCIAL TOTAL	10,184	1.00		1,755	1,755.00	1.00		0.95	-	1.05

Notes for this table follow the map.

FIGURE 44

ALCOHOL-RELATED DEATHS BY LOCAL HEALTH AREA

British Columbia, 2004-2008


N
QUINTILE (SMR)
5 (>2.10)
4 (1.49-2.10)
3 (1.21-1.49)
3 (1.00-1.21)
1 (<1.00)
Statistically Significant
0
100
200
300 kms
see inset 1
Inset 2
0
see inset 2
Inset 1
0
50 kms

Notes to Table 41

*Statistical testing indicates that observed deaths are significantly different from the expected deaths ($p<0.05$, two tailed).

+Denotes significance based on less than five deaths. Coding practices from 1995 to 1999 may have produced over-counting of alcohol-related mortality. With the introduction of ICD-10 in 2000, more specific codes are available. Currently produced data should not be used in combination with data produced prior to 2000.

Note: Refer to Figure 1 to clarify geographical location of LHAs.

Smoking-Attributable Deaths

Table 42 and Figure 45 portray the number and percent of deaths in 2009 that were attributable to smoking for those aged 35 years and older. The age restriction relates to the fact that smoking-attributable conditions generally become apparent over time and after several years of tobacco use. Because the decedent's smoking history is usually not available on the death record, the link between smoking and mortality is estimated indirectly. Research-derived proportions of deaths from certain diseases (like lung cancer) that are due to smoking are used to estimate the number of smoking-attributable deaths due to those diseases. See the Glossary entry on smoking-attributable mortality (SAM) for details and the Methodology section for the calculation formulae for these indicators.

Figure 45 shows the smoking-attributable portion of each of seven cause-of-death categories selected according to highest SAM number from Table 42.

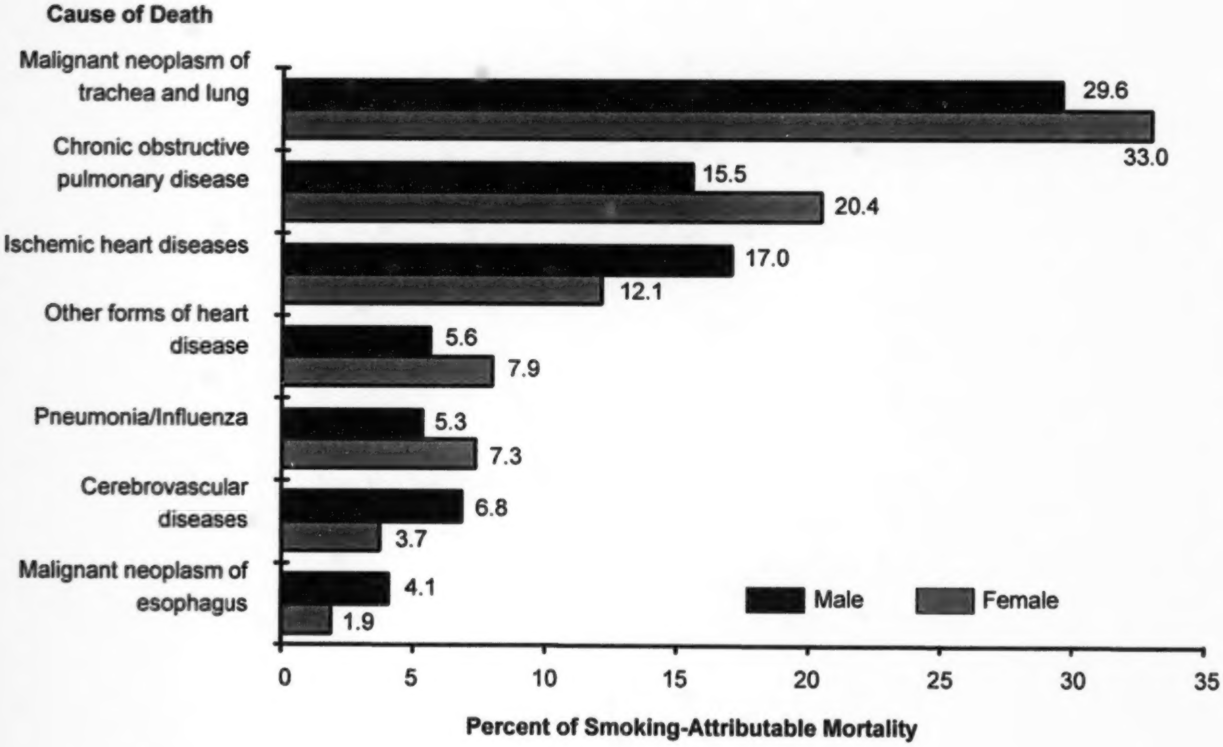
Table 42 shows the number of deaths by causes and the percentage and number of those deaths that are attributed to smoking. Also shown is the percentage of total SAM by cause category.

In 2009, there were 6,089 deaths attributed to smoking as shown in Table 42. By far the largest disease category was malignant neoplasms of trachea and lung (31.0 percent) followed by chronic obstructive pulmonary disease (17.6 percent) and ischemic heart disease (15.0 percent).

FIGURE 45

SMOKING-ATTRIBUTABLE MORTALITY BY SELECTED CAUSES AND GENDER

BRITISH COLUMBIA, 2009



Note: Ischemic heart disease includes 35-64 years and 65+ years.
Cerebrovascular disease includes 35-64 years and 65+ years.

TABLE 42
SMOKING-ATTRIBUTABLE MORTALITY
BRITISH COLUMBIA, 2009

		Male				Female				Total		
				SAM				SAM			SAM	
Cause of Death	ICD-10 Code(s)	Deaths	SAM (%)	Number	Percent	Deaths	SAM (%)	Number	Percent	Deaths	Number	Percent
Malignant Neoplasms												
Malignant neoplasms of lip, oral cavity and pharynx	C00-C14	112	91.2	102	2.9	48	59.9	29	1.1	160	131	2.1
Malignant neoplasm of esophagus	C15	186	78.2	145	4.1	66	71.0	47	1.9	252	192	3.2
Malignant neoplasm of pancreas	C25	313	21.7	68	1.9	236	33.9	80	3.2	549	148	2.4
Malignant neoplasm of larynx	C32	34	79.7	27	0.8	6	87.2	5	0.2	40	32	0.5
Malignant neoplasm of trachea and lung	C33-C34	1,186	89.3	1,059	29.6	1,081	76.5	827	33.0	2,267	1,886	31.0
Malignant neoplasms of cervix, uterus	C53-C55	-	-	-	-	120	33.9	41	1.6	120	41	0.7
Malignant neoplasm of bladder	C67	207	44.8	93	2.6	89	37.6	33	1.3	296	126	2.1
Malignant neoplasm of kidney and other unspecified urinary organs	C64-C66, C68	139	46.8	65	1.8	76	12.4	9	0.4	215	74	1.2
SUBTOTAL		**2,177**		**1,560**	**43.6**	**1,722**		**1,071**	**42.7**	**3,899**	**2,631**	**43.2**
Circulatory System Diseases												
Hypertension	I10-I13	142	24.6	35	1.0	209	16.4	34	1.4	351	69	1.1
Ischemic heart diseases :	I20-I25											
35-64 years		445	43.2	192	5.4	96	36.5	35	1.4	541	227	3.7
65+ years		1,980	21.1	418	11.7	1,838	14.6	268	10.7	3,818	686	11.3
Other forms of heart disease	I01-I09, I27, I30-I52	760	26.5	201	5.6	1,028	19.4	199	7.9	1,788	401	6.6
Cerebrovascular diseases :	I60-I69											
35-64 years		95	44.8	43	1.2	66	49.3	33	1.3	161	75	1.2
65+ years		861	23.4	201	5.6	1,272	4.8	61	2.4	2,133	263	4.3
Atherosclerosis	I70	26	55.5	14	0.4	42	31.7	13	0.5	68	28	0.5
Aortic aneurysm	I71	120	55.5	67	1.9	64	31.7	20	0.8	184	87	1.4
Other arterial diseases	I26, I28, I72-I78	84	55.5	47	1.3	93	31.7	29	1.2	177	76	1.2
SUBTOTAL		**4,513**		**1,218**	**34.0**	**4,708**		**694**	**27.6**	**9,221**	**1,912**	**31.4**
Respiratory System Diseases												
Pneumonia/Influenza	J09-J181, J188, J189	580	32.7	190	5.3	698	26.3	184	7.3	1,278	373	6.1
Bronchitis, emphysema	J40-J43	57	84.7	48	1.3	49	79.2	39	1.5	106	87	1.4
Chronic obstructive pulmonary disease	J44	657	84.7	556	15.5	648	79.2	513	20.4	1,305	1,070	17.6
Other respiratory diseases	A15-A19, J45-J46	23	32.7	8	0.2	34	26.3	9	0.4	57	16	0.3
SUBTOTAL		**1,317**		**802**	**22.4**	**1,429**		**745**	**29.7**	**2,746**	**1,546**	**25.4**
TOTAL		**8,007**		**3,579**	**100.0**	**7,859**		**2,510**	**100.0**	**15,866**	**6,089**	**100.0**

Note: Deaths are the total number of deaths aged 35+ years or as specified in the diagnostic category.
SAM – Smoking-Attributable Mortality, derived by multiplying the SAM(%) by the number of deaths in each category.
See glossary under Smoking-Attributable Mortality Percent for a definition of the formula for SAM(%).
Total SAM Number may not add up to the sum of Male SAM Number and Female SAM Number due to rounding.
Non-residents are excluded.
The output from ICD-10 mortality coding and underlying cause of death selection was modified in BC to reflect the intent of certifiers in this jurisdiction and to provide greater continuity over time. Data using the standard ICD-10 rules for such categories as pneumonia/influenza, diabetes, or cancer should not be compared to the numbers shown above.

Drug-Induced Deaths

Drug-induced deaths are all deaths directly due to drug use, including use of illicit, prescribed, and over-the-counter drugs. This category excludes causes indirectly related to drug use and also excludes those deaths due to alcohol or smoking. See Table 44 for a list of the drug induced death categories.

Table 43 shows that more males (232) died of drug-induced causes than females (131). Among individuals aged 25 to 64 years, there were 308 drug-induced deaths (84.8 percent), and 176 drug-induced deaths (48.5 percent) in the 45 to 64 year age-group.

Table 44 presents drug-induced deaths by cause for 2004-2008 and 2009. In 2009, 67.5 percent of drug-induced deaths were the result of accidental poisoning by drugs compared to 67.1 percent in the previous five years. Of the 452 suicide deaths in BC in 2009, 17.7 percent were drug-induced.

Figure 46 is a graphic presentation of the results from Table 44. In 2009, almost all drug induced deaths were unintentional poisoning or suicide.

Table 45 shows the number of observed and expected drug-induced deaths and the ratio of observed to expected deaths (SMR) in each LHA in 2009 and in the previous five years. In 2009, 30 LHAs had no drug-induced deaths and 7 had no drug-induced deaths in 2004-2008. Vancouver - City Centre , Penticton and Vancouver - Downtown Eastside were the only LHAs where the observed number of deaths was more than 5 and statistically significantly higher than the expected numbers in 2009 as well as the previous five years.

Figure 47 maps the variation of SMRs in the LHAs divided into quintiles for 2004-2008.

TABLE 43
DRUG-INDUCED DEATHS BY AGE AND GENDER
BRITISH COLUMBIA, 2009

Age	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
<15	-	-	1	0.8	1	0.3
15-19	2	0.9	1	0.8	3	0.8
20-24	10	4.3	9	6.9	19	5.2
25-44	90	38.8	42	32.1	132	36.4
45-64	112	48.3	64	48.9	176	48.5
65-84	15	6.5	12	9.2	27	7.4
85+	3	1.3	2	1.5	5	1.4
TOTAL	**232**	**100.0**	**131**	**100.0**	**363**	**100.0**

Note: Excludes tobacco and alcohol

Drug-induced deaths – see Table 44 for ICD-10 codes and Glossary for more details.
Total percentage may not add up to 100 due to rounding.
Non-residents are excluded.

TABLE 44
DRUG-INDUCED DEATHS BY CAUSE
BRITISH COLUMBIA, 2004–2008 AND 2009

		Year of Death			
		2004–2008		2009	
Cause of Death	ICD-10 Code(s)	Number	Percent	Number	Percent
Psychoactive substance and drug use/abuse	**F11-F16, F19**	**126**	**6.0**	**15**	**4.1**
Accidental poisoning by drugs	X40-X44	1,405	67.1	245	67.5
Suicide by drugs	X60-X64	470	22.4	80	22.0
Assault by drugs and medicaments	**X85**	**1**	**0.0**	**-**	**-**
Poisoning by drugs and medicaments undetermined if accidental or intentional	Y10-Y14	70	3.3	14	3.9
Adverse effects of drugs and medicaments	Y40-Y574, Y577-Y579, Y598, Y880	21	1.0	8	2.2
Other drug causes*		**1**	**0.0**	**1**	**0.3**
TOTAL		**2,094**	**100.0**	**363**	**100.0**

Note: Excludes tobacco and alcohol. Total percentage may not add to 100 due to rounding. Non-residents are excluded.
*ICD-10 codes D521, D590, D592, D611, D642, E032, E064, E231, E242, E273, F55, F551, G210, G211, G240, G251, G254, G256, G444, G620, G720, H263, I427, I952, J702, J703, J704, L105, L233, L244, L251, L270, L271, L432, L560, L561, L640, M022, M102, M320, M804, M814, M835, M871, N140, N141, N142, O355, P040, P041, P044, P584, P961, P962, R781, R782, R783, R784, R785, R786, R825.

FIGURE 46
DRUG-INDUCED DEATHS BY CAUSE
BRITISH COLUMBIA, 2009

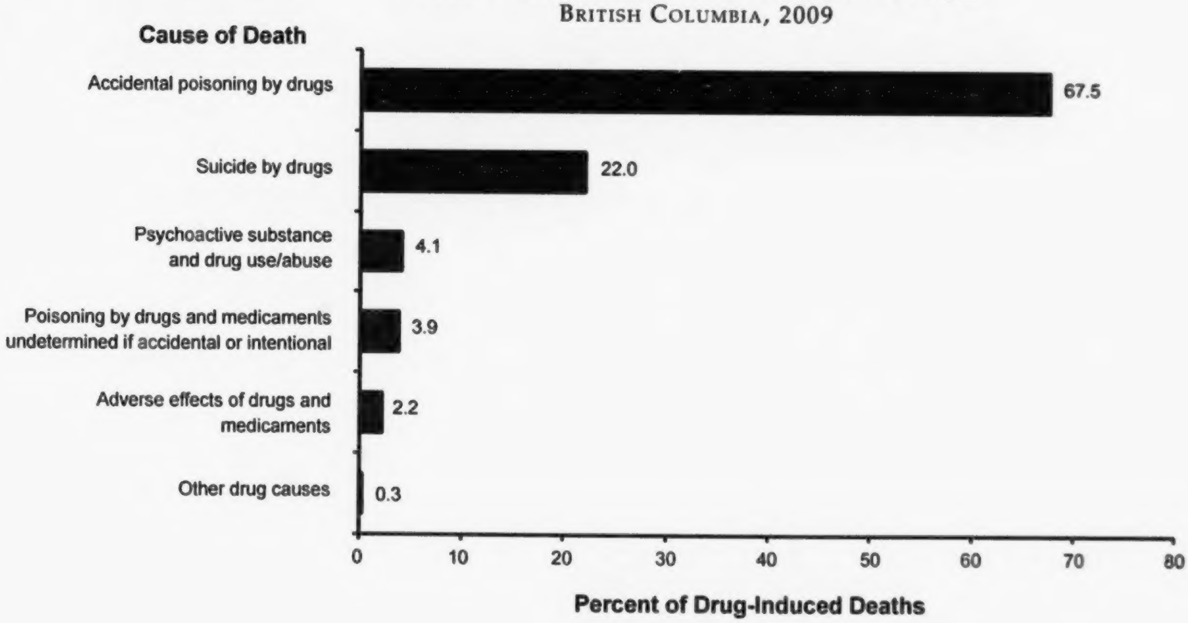


Table 45

STANDARDIZED MORTALITY RATIO BY LOCAL HEALTH AREA DRUG-INDUCED DEATHS,
BRITISH COLUMBIA, 2004–2008 AND 2009

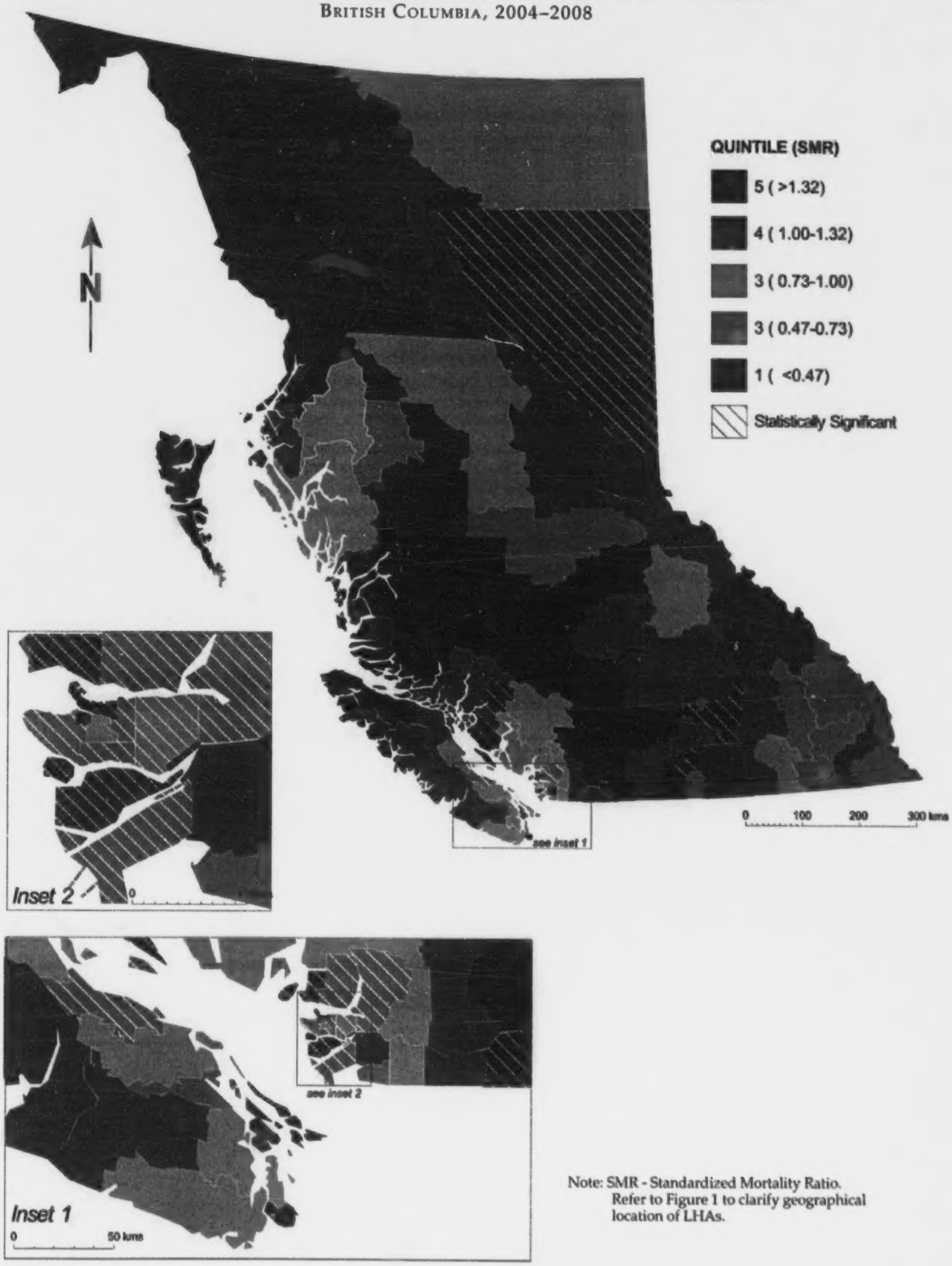
		2004–2008			2009				95% Confidence Interval		
	Local Health Area	Observed Deaths	SMR	(p)	Observed Deaths	Expected Deaths	SMR	(p)	Lower		Upper
001	Fernie	4	0.53		1	1.27	0.79		0.01	-	4.38
002	Cranbrook	13	1.10		2	2.04	0.98		0.11	-	3.53
003	Kimberley	2	0.50		-	0.71	-		-	-	-
004	Windermere	3	0.64		-	0.89	-		-	-	-
005	Creston	3	0.56		1	0.94	1.07		0.01	-	5.95
006	Kootenay Lake	1	0.55		-	0.32	-		-	-	-
007	Nelson	12	0.99		-	2.09	-		-	-	-
009	Castlegar	7	1.11		-	1.09	-		-	-	-
010	Arrow Lakes	3	1.31		-	0.39	-		-	-	-
011	Trail	10	1.08		1	1.57	0.64		0.01	-	3.55
012	Grand Forks	1	0.24		1	0.71	1.41		0.02	-	7.87
013	Kettle Valley	-	-		1	0.31	3.26		0.04	-	18.14
014	Southern Okanagan	5	0.59		1	1.52	0.66		0.01	-	3.66
015	Penticton	34	1.82	*	9	3.31	2.72	*	1.24	-	5.17
016	Keremeos	3	1.34		-	0.40	-		-	-	-
017	Princeton	3	1.26		-	0.42	-		-	-	-
018	Golden	1	0.28		-	0.64	-		-	-	-
019	Revelstoke	1	0.25		1	0.67	1.50		0.02	-	8.33
020	Salmon Arm	20	1.30		2	2.78	0.72		0.08	-	2.60
021	Armstrong - Spallumcheen	3	0.68		1	0.75	1.32		0.02	-	7.37
022	Vernon	41	1.40	*	8	5.20	1.54		0.66	-	3.03
023	Central Okanagan	89	1.11		14	14.77	0.95		0.52	-	1.59
024	Kamloops	60	1.17		7	8.97	0.78		0.31	-	1.61
025	100 Mile House	9	1.27		-	1.20	-		-	-	-
026	North Thompson	2	0.95		-	0.35	-		-	-	-
027	Cariboo - Chilcotin	18	1.40		4	2.16	1.85		0.50	-	4.75
028	Quesnel	8	0.71		1	1.89	0.53		0.01	-	2.95
029	Lillooet	4	1.90		1	0.36	2.81		0.04	-	15.65
030	South Cariboo	5	1.46		3	0.59	5.11	+	1.03	-	14.92
031	Merritt	9	1.66		1	0.92	1.09		0.01	-	6.06
032	Hope	7	1.83		-	0.64	-		-	-	-
033	Chilliwack	50	1.38	*	8	6.39	1.25		0.54	-	2.47
034	Abbotsford	63	1.05		11	10.43	1.05		0.53	-	1.89
035	Langley	44	0.75		7	10.19	0.69		0.28	-	1.42
037	Delta	32	0.66	*	5	7.95	0.63		0.20	-	1.47
038	Richmond	33	0.36	*	4	15.93	0.25	+	0.07	-	0.64
040	New Westminster	50	1.54	*	4	5.66	0.71		0.19	-	1.81
041	Burnaby	78	0.73	*	7	18.59	0.38	*	0.15	-	0.78
042	Maple Ridge	36	0.83		10	7.49	1.33		0.64	-	2.45
043	Coquitlam	66	0.64	*	11	17.82	0.62		0.31	-	1.10
044	North Vancouver	43	0.64	*	12	11.39	1.05		0.54	-	1.84
045	West Vancouver-Bowen Is.	7	0.30	*	4	3.95	1.01		0.27	-	2.59
046	Sunshine Coast	10	0.74		2	2.44	0.82		0.09	-	2.96
047	Powell River	17	1.80	*	2	1.59	1.26		0.14	-	4.53
048	Howe Sound	13	0.77		5	3.02	1.65		0.53	-	3.86
049	Bella Coola Valley	2	1.39		-	0.23	-		-	-	-
050	Queen Charlotte	4	1.65		-	0.39	-		-	-	-
051	Snow Country	-	-		-	0.04	-		-	-	-
052	Prince Rupert	8	1.14		1	1.13	0.89		0.01	-	4.94
053	Upper Skeena	1	0.40		-	0.41	-		-	-	-
054	Smithers	5	0.65		-	1.25	-		-	-	-
055	Burns Lake	-	-		-	0.61	-		-	-	-
056	Nechako	7	0.97		-	1.15	-		-	-	-
057	Prince George	48	1.02		8	7.82	1.02		0.44	-	2.02
059	Peace River South	5	0.40	*	-	2.14	-		-	-	-
060	Peace River North	7	0.45	*	-	2.70	-		-	-	-
061	Greater Victoria	161	1.49	*	27	18.46	1.46		0.96	-	2.13
062	Sooke	25	0.81		4	5.57	0.72		0.19	-	1.84
063	Saanich	25	0.85		4	5.01	0.80		0.21	-	2.04
064	Gulf Islands	8	1.11		2	1.31	1.53		0.17	-	5.51
065	Cowichan	23	0.89		5	4.46	1.12		0.36	-	2.62
066	Lake Cowichan	3	0.99		1	0.53	1.88		0.02	-	10.45
067	Ladysmith	4	0.48		-	1.50	-		-	-	-
068	Nanaimo	46	0.97		11	8.30	1.32		0.66	-	2.37
069	Qualicum	11	0.56	*	3	3.58	0.84		0.17	-	2.45
070	Alberni	16	1.08		5	2.54	1.97		0.64	-	4.60
071	Courtenay	26	0.89		6	5.16	1.16		0.42	-	2.53
072	Campbell River	28	1.30		5	3.41	1.47		0.47	-	3.42
075	Mission	25	1.26		4	3.41	1.17		0.32	-	3.00
076	Agassiz - Harrison	7	1.74		1	0.69	1.46		0.02	-	8.12
077	Summerland	1	0.19		-	0.91	-		-	-	-
078	Enderby	4	1.15		-	0.60	-		-	-	-
080	Kitimat	4	0.75		-	0.85	-		-	-	-
081	Fort Nelson	3	0.95		-	0.50	-		-	-	-
083	Central Coast	-	-		1	0.11	9.19		0.12	-	51.14
084	Vancouver Island West	-	-		-	0.20	-		-	-	-
085	Vancouver Island North	9	1.44		2	1.00	2.00		0.22	-	7.22
087	Stikine	-	-		-	0.08	-		-	-	-
088	Terrace	8	0.84		1	1.57	0.64		0.01	-	3.55
092	Nisga'a	2	2.21		-	0.15	-		-	-	-
094	Telegraph Creek	-	-		-	0.05	-		-	-	-
161	Vancouver - City Centre	88	1.33	*	23	11.67	1.97	*	1.25	-	2.96
162	Vancouver - Downtown E.side	192	5.70	*	40	6.26	6.39	*	4.56	-	8.70
163	Vancouver - North East	36	0.72	*	9	8.69	1.04		0.47	-	1.97
164	Vancouver - Westside	39	0.60	*	2	10.94	0.18	+	0.02	-	0.66
165	Vancouver - Midtown	40	0.90		6	7.61	0.79		0.29	-	1.72
166	Vancouver - South	34	0.52	*	5	10.96	0.46		0.15	-	1.06
201	Surrey	186	1.10		29	29.80	0.97		0.65	-	1.40
202	South Surrey/White Rock	27	0.72		5	6.56	0.76		0.25	-	1.78
	PROVINCIAL TOTAL	**2,094**	**1.00**		**363**	**363.00**	**1.00**		**0.90**	**-**	**1.11**

Note: *Statistical testing indicates that observed deaths are significantly different from the expected deaths ($p<0.05$, two tailed). +Denotes significance based on less than five deaths. SMR - Standardized Mortality Ratio. Total includes residents with unknown LHA.

FIGURE 47

DRUG-INDUCED DEATHS BY LOCAL HEALTH AREA

British Columbia, 2004–2008


QUINTILE (SMR)
5 (>1.32)
4 (1.00-1.32)
3 (0.73-1.00)
3 (0.47-0.73)
1 (<0.47)
Statistically Significant
N
0
100
200
300 kms
see inset 1
Inset 2
0
see inset 2
Inset 1
0
50 kms

Note: SMR - Standardized Mortality Ratio.
Refer to Figure 1 to clarify geographical location of LHAs.

Drug Overdose Deaths

This section provides information on deaths due to unintentional poisoning by illicit/illegal drugs. These deaths are a small portion of deaths due to unintentional poisoning by drugs, and exclude accidental poisoning by drugs in therapeutic use.

Data on unintentional illicit/illegal drug deaths are retrieved from the Coroners' Medical Certificate of Death. This section only considers deaths where an overdose occurred and was determined to be the underlying cause of death. Deaths due to conditions that may arise from substance abuse, such as Hepatitis 'B' and 'C' and HIV, are excluded from consideration.

Among the substances implicated in these overdoses, there are those generally referred to as "illicit drugs" – heroin, cocaine, and "psychostimulants with abuse potential" including "crystal meth" (methamphetamine hydrochloride) and "ecstasy" (methylenedioxy-methamphetamine). A more precise term for these chemicals might be "illegal" drugs as there is no medically recognized, legal use for either "ecstasy" or "crystal meth". Although both heroin and cocaine have very limited therapeutic uses, in circumstances where a fatal overdose has occurred it is almost certain that these drugs would have been obtained via illegal means.

On the other hand, where morphine is implicated, it is possible that some of the deaths involved legally obtained drugs because morphine is prescribed for chronic and/or severe pain (such as that associated with advanced cancer) and if taken improperly could result in an unintentional overdose. Unfortunately, it is not always possible to differentiate whether an opiate overdose was caused by heroin or morphine, as the information received on the coroners' final reports does not consistently differentiate. Often coroners record "morphine type" overdose, hence the label "heroin/morphine type".

Although methadone is often used legally in the treatment of opiate addiction, a number of deaths are occurring as the result of unintentional methadone overdoses. Therefore, it would appear that methadone is being used in unsanctioned ways resulting in death.

Table 46 shows that deaths due to unintentional overdoses are not confined to any one area in the province. ASMRs for 2009 at the time of reporting appear to have declined in all areas. However, as with other externally caused deaths, reporting is often delayed due to the time required for coroners to complete and report their findings to the Agency. Therefore, these results should be viewed with caution.

Table 47 and Figure 48 depict a general decline in drug overdose fatalities. The ASMR has been consistently much higher for males than for females.

TABLE 46
ASMR FOR UNINTENTIONAL ILLICIT/ILLEGAL OVERDOSE DEATHS BY HEALTH AUTHORITY
BRITISH COLUMBIA, 2003–2009

Health Authority	2003	2004	2005	2006	2007	2008	2009
01 Interior	0.78	0.75	0.71	0.53	0.66	0.52	0.40
02 Fraser	0.43	0.41	0.58	0.68	0.43	0.47	0.30
03 Vancouver Coastal	0.49	0.58	0.63	0.61	0.51	0.41	0.51
04 Vancouver Island	0.71	0.75	0.64	0.75	0.60	0.63	0.46
05 Northern	0.43	0.40	0.37	0.18	0.47	0.39	0.18
PROVINCIAL TOTAL	**0.54**	**0.56**	**0.60**	**0.61**	**0.51**	**0.49**	**0.39**

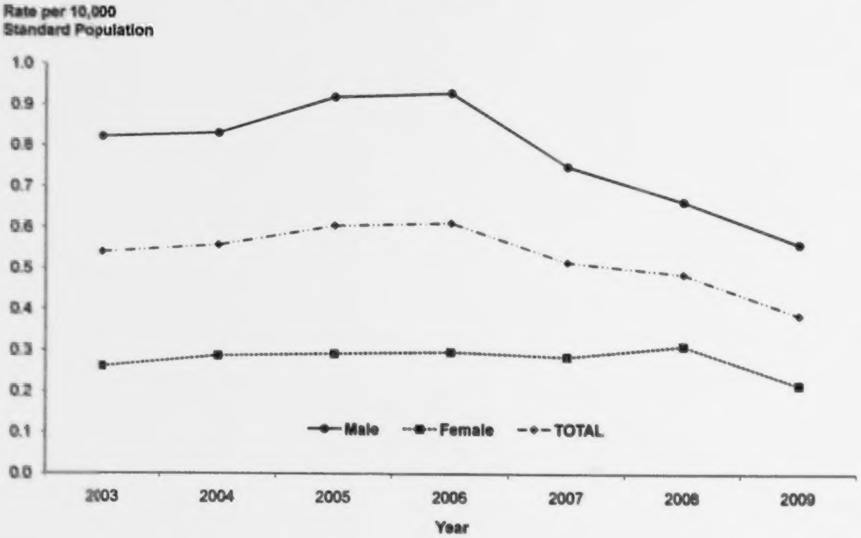
Note: Deaths that are still under investigation may later be identified as unintentional illicit/illegal overdose deaths.
ASMR - Age Standardized Mortality Rate per 10,000 standard population (Canada 1991 Census).
Non-residents are excluded.

TABLE 47
ASMR FOR UNINTENTIONAL ILLICIT/ILLEGAL OVERDOSE DEATHS BY GENDER
BRITISH COLUMBIA, 2003–2009

Gender	2003	2004	2005	2006	2007	2008	2009
Male	0.82	0.83	0.92	0.93	0.75	0.66	0.56
Female	0.26	0.29	0.29	0.30	0.28	0.31	0.22
TOTAL	**0.54**	**0.56**	**0.60**	**0.61**	**0.51**	**0.49**	**0.39**

Note: Deaths that are still under investigation may later be identified as unintentional illicit/illegal overdose deaths.
ASMR - Age Standardized Mortality Rate per 10,000 standard population (Canada 1991 Census).
Non-residents are excluded.

FIGURE 48
ASMR FOR UNINTENTIONAL ILLICIT/ILLEGAL OVERDOSE DEATHS BY GENDER
BRITISH COLUMBIA, 2003-2009



See Table 47 for notes.

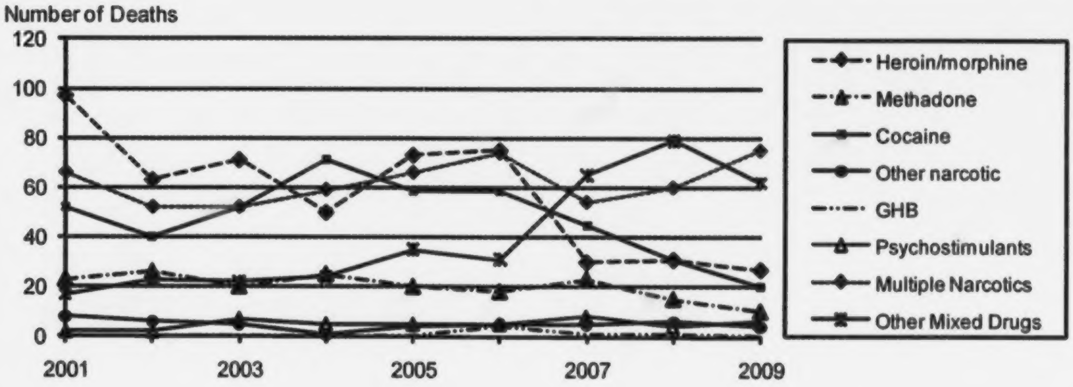
Vital Statistics Information Box

UNINTENTIONAL ILLICIT/ILLEGAL DRUG DEATHS
BRITISH COLUMBIA, 2001-2009

*I*n 1993, British Columbia experienced an unprecedented "high water" mark in unintentional drug overdoses. In that year, 470 people died as the result of unintentional poisoning by drugs. Over 300 of these were determined to be the result of illicit drug use. These included heroin and other opiates, methadone, and cocaine, used alone or in various combinations or with a variety of other substances being used illicitly.

This information box provides a code-based analysis of deaths due to unintentional illicit drug overdoses in British Columbia since 2001. It is important to note that numbers for 2009 (and to a certain extent previous years) may be revised upwards as final reports from investigating coroners are submitted to the Agency for processing. This analysis includes deaths where unintentional drug overdose was determined to be the "underlying cause of death" (see Glossary for the definition of this term), and where the offending substances included selected "narcotics and psychodsleptics" - heroin, morphine, methadone, and cocaine - and "psychostimulants with abuse potential", specifically so-called "crystal meth" (methamphetamine hydrochloride) and "ecstasy" (methylenedioxymethamphetamine). "Mixed drug overdoses" included at least one of the above substances, as well as any other drug. A seperate total for deaths in which mixed narcotics, such as heroin with cocaine, were implicated is also included because multiple narcotic substances are used in combination relatively frequently.

UNINTENTIONAL ILLICIT/ILLEGAL OVERDOSE DEATHS BY TYPE OF DRUG
BRITISH COLUMBIA, 2001-2009



Vital Statistics Information Box

COUNTS OF DEATHS BY CAUSATIVE SUBSTANCES

Over the past nine years, deaths involving single heroin/morphine type drug use appear to be declining slightly. On the other hand, deaths where cocaine was the only substance implicated appear to be on the increase, along with deaths from combined narcotics.

Deaths from the combined use of illicit drugs with other drugs (other than narcotics) have risen sharply since 2007 and remained the leading cause of illicit drug overdose in 2008. Multiple narcotics became the leading cause of illicit drug overdose in 2009.

The use of psychostimulants is a relatively new phenomenon. Its place as the direct cause of unintentional overdose does not appear to be rising. It is interesting to note that methadone, a substance used in the treatment of heroin addiction, is apparently being used illicitly and causing overdose deaths itself.

OVERDOSE DEATHS BY TYPE OF DRUG

BRITISH COLUMBIA, 2001-2009

Drug	2001	2002	2003	2004	2005	2006	2007	2008	2009
Heroin/morphine type only	97	63	71	50	73	75	30	31	27
Methadone only	23	26	20	25	20	18	23	15	10
Cocaine only	52	40	52	71	59	59	45	31	20
Other narcotic/ hallucinongen only	8	6	5	1	4	5	5	6	4
GHB only	0	0	0	0	0	4	1	1	0
Physchostimulants* only	2	2	7	5	5	5	8	4	6
Multiple narcotics	66	52	52	59	66	74	54	60	75
Other mixed drugs	17	23	22	24	35	31	65	79	62
TOTAL	**265**	**212**	**229**	**235**	**262**	**271**	**231**	**227**	**204**

Note: Deaths that were still under investigation may later be identified as unintentional illicit/illegal overdose deaths.
*ICD-10 codes for psychostimulants include "crystal meth" and "ecstasy".
Unintentional illicit/illegal drug overdose deaths (X41, X42, X44) include these specified drug injury categories:

1) T40.0, T40.1, or T40.2 for heroin/morphine type.
2) T40.3 for methadone.
3) T40.5 for cocaine.
4) T40.4, T40.6, T40.9 for other narcotic/hallucinogen.
5) T41.2 for gamma hydroxybutyrate (GHB).
6) T43.6 for psychostimulant*.

Multiple Narcotic deaths involve mixed drugs from categories 1 - 4 only.
Other Mixed Drug deaths include one illicit drug from categories 1 - 6 (T40.0-T40.9, T41.2, T43.6) and one or more other drugs (T36.0-T48.6, T52.8, T53.9) and are not multiple narcotic deaths.
Non-residents are excluded.

Accidental Fall Deaths

In 2009, there were 1,700 deaths due to external causes among BC residents and of these, unintentional (accidental) deaths comprised over 67.7 percent (1,151) of non-natural deaths. Overall, falls were the leading cause of unintentional death, contributing 36.2 percent to this category in 2009 and exceeding fatal motor-vehicle incidents 417 to 252 (see Table 30).

Analysis of various causes of unintentional (accidental) mortality in 2009 shows that more females died as the result of a fall than males did. Of unintentional mortality, 28.4 percent of male deaths were the result of falls. In contrast, 49.0 percent of female unintentional mortality was the result of falls.

While fatal falls occur across the lifespan of British Columbians, the elderly are far more likely to succumb to the effects of a fall.

The data discussed so far only include events where the fall was determined to be the underlying cause of death (direct). There are additional deaths that involve accidental falls, but where the fall was considered to be only a contributing factor (indirect).

Table 48 and Figure 49 show how age specific rates compare between the two categories (direct and indirect) of fall-related deaths in BC for individuals aged 60 and older. Indirect fall-related deaths are more frequent among the over 70 age group than direct fall deaths; however, in the 60-69 age groups, direct fall deaths are more frequent.

The BC Injury Research and Prevention Unit (BCIRPU) is a national leader in falls injury research and in the design and implementation of falls prevention strategies. A summary of the initiatives undertaken by the BCIRPU can be viewed at the Unit's website: http://www.injuryresearch.bc.ca/index.aspx under "Falls Prevention" in the "Injury Topics" menu.

TABLE 48

DEATHS DIRECTLY AND INDIRECTLY DUE TO FALLS BY AGE

BRITISH COLUMBIA, 2003–2009

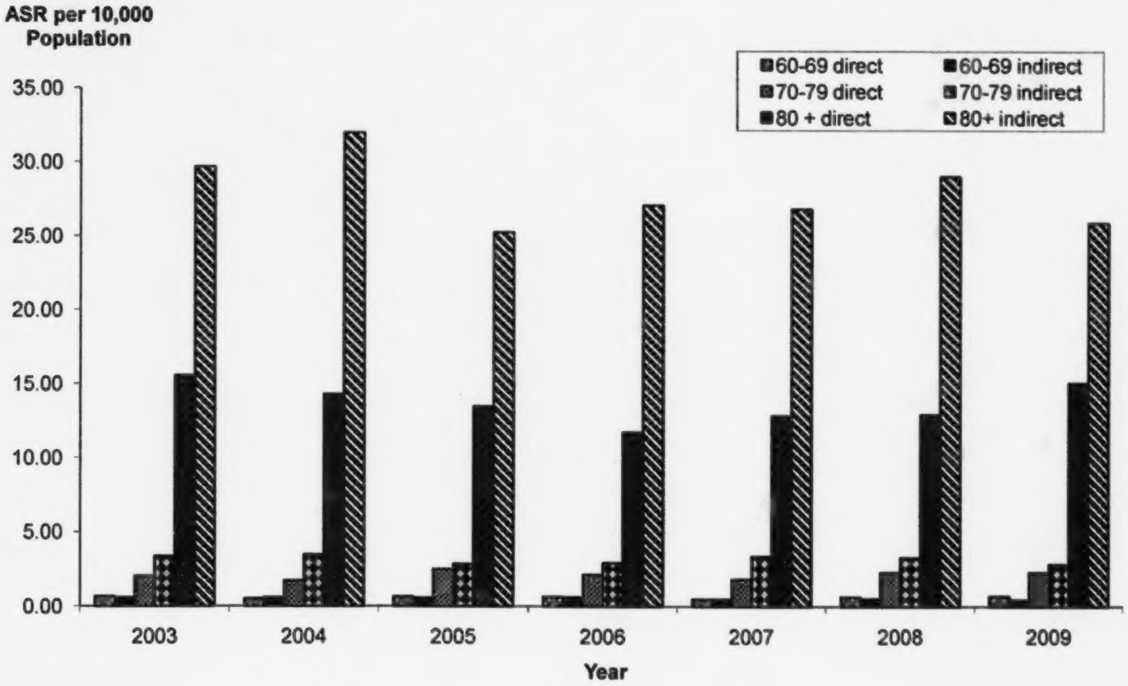
	Age	2003		2004		2005		2006		2007		2008		2009	
Cause of Death	(inYears)	Counts	ASR	Counts	ASR	Counts	ASR	Counts	ASR	Counts	ASR	Counts	ASR	Counts	ASR
Directly due to falls															
	60-69	23	0.67	18	0.50	24	0.65	25	0.64	20	0.48	28	0.64	32	0.70
	70-79	52	2.03	44	1.71	65	2.50	56	2.12	49	1.83	62	2.28	63	2.28
	80+	231	15.54	221	14.27	216	13.46	195	11.73	221	12.83	230	12.92	278	15.07
Indirectly due to falls															
	60-69	20	0.58	21	0.59	21	0.56	24	0.62	20	0.48	23	0.53	21	0.46
	70-79	86	3.36	89	3.45	74	2.84	77	2.92	90	3.37	89	3.28	78	2.83
	80+	441	29.67	495	31.97	405	25.24	450	27.06	462	26.82	517	29.03	478	25.90

Note: ASR - Age Specific Rate per 10,000 population.

FIGURE 49

DEATHS DIRECTLY AND INDIRECTLY DUE TO FALLS, AGES 60-80+

BRITISH COLUMBIA, 2003-2009



Burials and Cremations

Table 49 shows the method used to dispose of decedents' remains.

In 2009, 80.7 percent of deaths resulted in cremations (25,190) and 18.7 percent involved burials (5,842).

Since 1986, the percentage of burials has consistently decreased.

TABLE 49
METHOD OF DISPOSITION OF DECEDENT
BRITISH COLUMBIA, 1986–2009

Year	Burial		Cremation		Other	N.S.	Total
	Number	Percent	Number	Percent			
1986	8,204	39.0	12,686	60.4	98	21	21,009
1987	8,211	38.0	13,279	61.4	104	24	21,618
1988	8,319	37.2	13,926	62.3	96	16	22,357
1989	8,061	35.4	14,616	64.1	81	28	22,786
1990	8,208	35.1	15,088	64.4	91	29	23,416
1991	8,035	33.7	15,675	65.8	75	35	23,820
1992	7,818	32.0	16,512	67.5	97	36	24,463
1993	7,989	31.2	17,214	67.2	151	251	25,605
1994	7,712	29.9	17,888	69.2	177	55	25,832
1995	7,615	29.0	18,361	70.0	186	63	26,225
1996	7,640	27.9	19,545	71.4	195	12	27,392
1997	7,359	27.0	19,651	72.1	208	46	27,264
1998	7,197	25.9	20,378	73.3	225	9	27,809
1999	7,062	25.3	20,633	74.0	198	-	27,893
2000	6,469	23.7	20,695	75.7	187	1	27,352
2001	6,687	23.7	21,331	75.5	223	1	28,242
2002	6,541	22.8	21,979	76.5	192	3	28,715
2003	6,608	22.7	22,362	76.7	187	-	29,157
2004	6,380	21.5	23,162	77.9	185	-	29,727
2005	6,281	20.9	23,633	78.5	186	-	30,100
2006	6,361	20.8	24,013	78.6	168	-	30,542
2007	6,148	19.8	24,804	79.7	168	-	31,120
2008	6,311	19.8	25,395	79.6	195	-	31,901
2009	5,842	18.7	25,190	80.7	195	-	31,227

Note: Percent is based on total deaths in the specified year.
Other includes remains not recovered and donations as per will of deceased.
N.S. – Not stated.
Non-residents are excluded.

Vital Statistics Information Box

METHOD OF DISPOSITION BY DECEDENT'S LOCAL HEALTH AREA OF RESIDENCE

BRITISH COLUMBIA, 2009

Local Health Area		Burial		Cremation		Other	Total
		Number	Percent	Number	Percent		
001	Fernie	23	24.5	71	75.5	-	94
002	Cranbrook	40	16.9	196	82.7	1	237
003	Kimberley	9	9.4	87	90.6	-	96
004	Windermere	6	12.8	40	85.1	1	47
005	Creston	36	22.4	125	77.6	-	161
006	Kootenay Lake	3	10.3	26	89.7	-	29
007	Nelson	38	20.0	150	78.9	2	190
009	Castlegar	40	37.4	67	62.6	-	107
010	Arrow Lakes	3	8.1	34	91.9	-	37
011	Trail	37	15.9	194	83.6	1	232
012	Grand Forks	30	27.8	78	72.2	-	108
013	Kettle Valley	2	8.7	21	91.3	-	23
014	Southern Okanagan	40	15.2	223	84.8	-	263
015	Penticton	73	12.7	499	86.9	2	574
016	Keremeos	10	15.4	54	83.1	1	65
017	Princeton	5	8.5	54	91.5	-	59
018	Golden	6	15.4	33	84.6	-	39
019	Revelstoke	10	16.1	51	82.3	1	62
020	Salmon Arm	54	15.8	287	83.9	1	342
021	Armstrong-Spallumcheen	10	12.2	72	87.8	-	82
022	Vernon	108	17.4	509	82.2	2	619
023	Central Okanagan	256	16.5	1,292	83.3	3	1,551
024	Kamloops	99	11.8	731	87.0	10	840
025	100 Mile House	19	13.4	122	85.9	1	142
026	North Thompson	6	17.1	29	82.9	-	35
027	Cariboo-Chilcotin	51	24.8	154	74.8	1	206
028	Quesnel	25	14.8	143	84.6	1	169
029	Lillooet	18	37.5	30	62.5	-	48
030	South Cariboo	18	23.4	59	76.6	-	77
031	Merritt	18	17.6	84	82.4	-	102
032	Hope	23	22.8	78	77.2	-	101
033	Chilliwack	136	18.4	604	81.5	1	741
034	Abbotsford	264	29.0	645	70.8	2	911
035	Langley	131	14.7	755	84.8	4	890
037	Delta	84	12.9	562	86.3	5	651
038	Richmond	231	26.3	639	72.9	7	877
040	New Westminster	85	17.7	391	81.3	5	481
041	Burnaby	350	26.0	968	72.0	26	1,344
042	Maple Ridge	89	14.9	503	84.1	6	598
043	Coquitlam	191	19.0	805	80.1	9	1,005
044	North Vancouver	125	15.8	661	83.4	7	793
045	West Vancouver-Bowen Is.	69	14.8	394	84.4	4	467
046	Sunshine Coast	29	10.7	242	89.0	1	272
047	Powell River	20	9.5	181	85.8	10	211
048	Howe Sound	22	18.2	99	81.8	-	121
049	Bella Coola Valley	9	64.3	5	35.7	-	14
050	Queen Charlotte	17	50.0	17	50.0	-	34
051	Snow Country	-	-	4	100.0	-	4
052	Prince Rupert	28	31.1	62	68.9	-	90
053	Upper Skeena	14	60.9	9	39.1	-	23
054	Smithers	24	27.9	62	72.1	-	86
055	Burns Lake/Eutsuk	20	33.3	40	66.7	-	60
056	Nechako	34	33.7	67	66.3	-	101
057	Prince George	104	18.0	475	82.0	-	579
059	Peace River South	57	32.4	119	67.6	-	176
060	Peace River North	45	31.7	97	68.3	-	142
061	Greater Victoria	264	12.4	1,858	87.2	8	2,130
062	Sooke	43	11.9	319	88.1	-	362
063	Saanich	69	10.9	561	88.9	1	631
064	Gulf Islands	13	8.8	133	90.5	1	147
065	Cowichan	54	12.3	384	87.5	1	439
066	Lake Cowichan	2	5.1	37	94.9	-	39
067	Ladysmith	48	19.4	199	80.6	-	247
068	Nanaimo	84	9.6	789	90.2	2	875
069	Qualicum	35	6.6	495	93.4	-	530
070	Alberni	52	17.4	247	82.6	-	299
071	Courtenay	44	8.3	488	91.7	-	532
072	Campbell River	27	8.5	291	91.5	-	318
075	Mission	30	11.5	231	88.5	-	261
076	Agassiz-Harrison	25	32.5	51	66.2	1	77
077	Summerland	16	12.0	117	88.0	-	133
078	Enderby	13	19.1	55	80.9	-	68
080	Kitimat	29	41.4	41	58.6	-	70
081	Fort Nelson	7	30.4	16	69.6	-	23
083	Central Coast	10	83.3	2	16.7	-	12
084	Vancouver Island West	2	15.4	11	84.6	-	13
085	Vancouver Island North	19	26.0	54	74.0	-	73
087	Stikine	4	80.0	1	20.0	-	5
088	Terrace	51	34.7	96	65.3	-	147
092	Nisga'a	10	100.0	-	0.0	-	10
094	Telegraph Creek	2	66.7	1	33.3	-	3
161	Vancouver - City Centre	116	17.1	558	82.2	5	679
162	Vancouver - Downtown E.side	134	28.5	327	69.6	9	470
163	Vancouver - North East	256	44.0	309	53.1	17	582
164	Vancouver - Westside	169	23.8	535	75.2	7	711
165	Vancouver - Midtown	166	36.6	280	61.7	8	454
166	Vancouver - South	282	33.7	546	65.2	9	837
201	Surrey	360	20.2	1,417	79.3	9	1,786
202	South Surrey/White Rock	109	12.9	737	87.0	1	847
	PROVINCIAL TOTAL	**5,842**	**18.7**	**25,190**	**80.7**	**196**	**31,227**

Note: Total includes residents with unkown LHA.

Marriage-related Statistics

Vital Statistics Information Box

MARRIAGES BY OTHER NON CHRISTIAN DENOMINATIONS

BRITISH COLUMBIA, 2009

Table 52, Religious Representatives on Register and Marriages Performed by Religious Denomination uses religious denomination categories from Statistics Canada. In 2009, a total of 1,228 marriages in British Columbia were solemnized by representatives of Other Non Christian religions. The table below provides additional details about these marriages.

Religious Denomination	Number of Religious Representatives	Number Who Performed Marriages	Number of Marriages Performed
Baha'i	102	30	50
Buddhist	27	11	34
Eckankar	16	-	-
Hindu	30	22	85
Muslim	69	39	163
Sangam	10	4	11
Scientology	9	2	2
Sikh	144	50	553
Spiritualist	104	54	315
Wiccan	13	6	10
Other*	9	4	4
Total	**533**	**222**	**1,227**

Note: *Other consists of religious denominations where the representatives performed less than 5 marriages in 2009: Unknown, Konko-Kyo, and Zoroastrian.

Marriage Introduction

The Agency records all marriages that occurred in BC. Unlike the birth and death statistics, which are based on usual residence, marriage information includes all marriages performed in the province whether the parties were residents or non-residents. The Agency does not record divorce decrees. The tables in this section contain information about marriages by previous marital status, ages of the parties involved, and type of ceremony.

In Table 50, the 22,469 marriages are categorized by the previous marital status of each partner. In 2009, in 67.2 percent (15,104) of marriages, both partners were marrying for the first time, and in 17.8 percent of marriages (3,997), one of the partners was marrying for the first time. There were 2,668 marriages (11.9 percent) where both partners were previously divorced.

Table 51 shows number of marriages by ages of those marrying in 2009. There were 7,287 marriages (32.4 percent) where both parties were in their 20s and 4,190 marriages (18.6 percent) where both parties were in their 30s. There were also 345 marriages (1.5 percent) where at least one party was in their teens and 1,235 marriages (5.5 percent) where at least one of those marrying was 60 years or older.

Table 52 indicates that there were 7,746 registered religious representatives in BC but less than half of them (3,167) solemnized marriages in 2009. In total, 8,499 (37.8 percent) of all marriages in 2009 were solemnized by religious representatives.

Table 53 shows the number of marriages performed by marriage commissioners, both private and public servants, and the number of each type of commissioner with appointments in 2009.

Table 53 shows that in 2009, 62.2 percent of marriages were civil marriages performed by commissioners. Since 1988, when 42.5 percent of marriages were performed by commissioners, the share of civil marriages has risen steadily.

TABLE 50
MARRIAGES BY MARITAL STATUS
BRITISH COLUMBIA, 2009

	Single	Widowed	Divorced	N.S.
Single	15,104			
Widowed	159	183		
Divorced	3,838	517	2,668	
N.S.	-	-	-	-

Note: N.S. - Not stated.

TABLE 51
MARRIAGES BY AGE
BRITISH COLUMBIA, 2009

Age (in Years)	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–59	60+	N.S.
15-19	56									
20-24	212	1,615								
25-29	64	2,019	3,653							
30-34	9	478	2,838	1,887						
35-39	3	118	760	1,549	754					
40-44	1	47	194	452	750	418				
45-49	-	15	51	134	324	552	312			
50-59	-	6	24	60	155	342	642	740		
60+	-	-	7	9	29	49	114	484	543	
N.S.	-	-	-	-	-	-	-	-	-	-

Note: N.S. – Not stated.

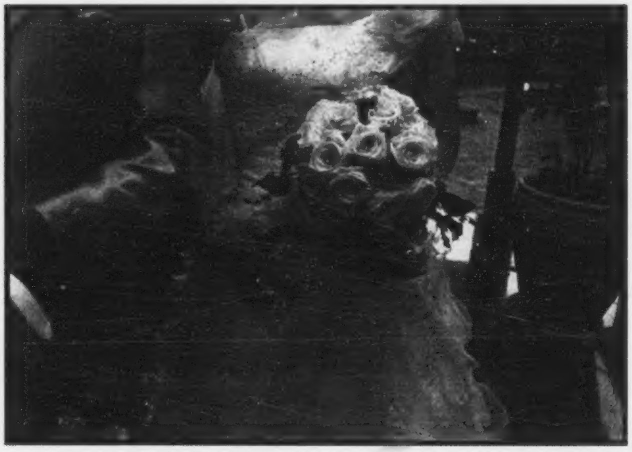


TABLE 52

RELIGIOUS REPRESENTATIVES ON REGISTER AND MARRIAGES PERFORMED BY RELIGIOUS DENOMINATION

BRITISH COLUMBIA, 2009

Religious Denomination	Number of Religious Representatives	Number Who Performed Marriages	Number of Marriages Performed
Anglican	495	212	491
Baptist	833	341	686
Eastern Orthodox	59	16	59
Jewish	36	15	57
Lutheran	261	109	231
Mennonite/Hutterite	446	214	432
Pentecostal	853	313	853
Presbyterian	230	95	155
Catholic	537	239	997
Salvation Army	183	42	74
Jehovahs Witness	87	57	125
United Church	501	264	754
Other Christian Religions	2,681	1,023	2,329
Other Non Christian Religions	533	222	1,228
Unknown/Not Stated	11	5	28
Total	**7,746**	**3,167**	**8,499**

Note: Religious categories shown above are from Statistics Canada. Individuals with temporary appointments are counted once for each appointment.

TABLE 53

MARRIAGE COMMISSIONERS ON REGISTER BY TYPE AND MARRIAGES PERFORMED

BRITISH COLUMBIA, 2009

Type of Commisioner	Number of Commissioners	Number Who Performed Marriages	Number of Marriages Performed
Private Commissioner*	521	482	13,967
Public Servant	9	2	3
Total	**530**	**484**	**13,970**

Note: Individuals with temporary appointments are counted once for each appointment.
* Includes 171 temporary appointments.

Vital Statistics Information Box

USUAL RESIDENCE OF PERSONS MARRIED IN BRITISH COLUMBIA IN 2009

OPPOSITE SEX MARRIAGES

Area	Province/State or Country	Males	Females
Canada	**Total**	**21,091**	**21,193**
	British Columbia	19,434	19,602
	Alberta	1,193	1,156
	Ontario	263	243
	Saskatchewan	75	73
	Manitoba	44	41
	Quebec	29	30
	Northwest Territories	14	14
	Yukon	13	10
	Nova Scotia	10	10
	New Brunswick	6	5
	Newfoundland & Labrador	5	5
	Nunavut	5	4
United States	**Total**	**491**	**389**
	Washington	160	112
	California	106	79
	Oregon	18	20
	New York	22	19
	Texas	19	17
	Florida	13	11
	Massachusetts	8	9
	Georgia	8	8
	Illinois	9	7
	Alaska	6	7
	Missouri	4	7
	Arizona	8	6
	Minnesota	6	6
	Hawaii	9	5
	Ohio	5	5
	Nevada	2	5
	Montana	2	5
	Other	86	61
Mexico, Central & South America	**Total**	**9**	**16**
	Mexico	4	8
	Other	5	8
Europe	**Total**	**193**	**173**
	United Kingdom	122	99
	Germany	27	32
	Scandinavian Countries	9	9
	Switzerland	11	10
	Republic of Ireland	7	4
	Italy	5	2
	Other	12	17
Asia & Middle East	**Total**	**39**	**58**
	Japan	10	16
	Hong Kong	11	14
	China	7	10
	Taiwan	3	5
	Other	8	13
Africa	**Total**	**3**	**3**
Oceania	**Total**	**42**	**37**
	Australia	32	29
	New Zealand	9	7
	Other	1	1
Unknown	**Total**	**1**	**-**
TOTAL		**21,869**	**21,869**

Vital Statistics Information Box

USUAL RESIDENCE OF PERSONS MARRIED IN BRITISH COLUMBIA IN 2009

SAME SEX MARRIAGES

Area	Province/State or Country	Males	Females
Canada	**Total**	**360**	**416**
	British Columbia	339	396
	Alberta	19	12
	Ontario	2	4
	Nova Scotia	-	2
	Saskatchewan	-	2
United States	**Total**	**98**	**202**
	Washington	18	39
	Texas	8	26
	Oregon	14	20
	Arizona	2	19
	California	24	16
	New York	4	10
	Georgia	6	6
	Virginia	2	6
	Utah	1	6
	New Mexico	1	5
	Hawaii	2	4
	Other	16	45
Mexico, Central & South America	**Total**	**1**	**2**
Europe	**Total**	**14**	**16**
	United Kingdom	1	10
	Other	13	6
Asia & Middle East	**Total**	**21**	**36**
	Hong Kong	8	12
	China	-	12
	Singapore	2	4
	Israel	5	2
	Other	6	6
Africa	**Total**	**2**	**-**
Oceania	**Total**	**8**	**24**
	Australia	6	24
	New Zealand	2	-
Unknown	**Total**	**-**	**-**
TOTAL		**504**	**696**

Glossary

Glossary Terms

ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS)

(See **HIV Disease.**)

AGE-SPECIFIC FERTILITY RATE (ASFR)

The rate of live births per 1,000 women for the specific age group. This is a more detailed measure than the crude birth rate, as it reflects variations in the birth rate by age groups of the female population.

(See ASFR under **Fertility Rate** in the Methodology section for an example.)

AGE STANDARDIZATION

Age standardization is a method of calculation which adjusts a statistical measure for differences in the age/gender structures between populations. With standardized measures, more meaningful comparisons can be made between genders, different time periods, or geographic areas because the age standardized statistic is calculated as if all populations had the same age/gender population distribution.

The age standardized measures in this report include **Age Standardized Mortality Rate (ASMR), Standardized Mortality Ratio (SMR), Potential Years of Life Lost Standardized Rate (PYLLSR),** and **Potential Years of Life Lost Index (PYLLI)**. (See the above headings in the Methodology section for examples.)

AGE STANDARDIZED MORTALITY RATE (ASMR)

A summary of age-adjusted death rates by age and gender, which have been standardized to a 'standard' population (1991 Canada Census) for the purpose of rate comparisons between genders, different time periods, or different geographic locations. The ASMR is the theoretical number of deaths that would occur per 10,000 population, if the specific population had the same age structure as the standard population. Age standardization is used for comparisons because populations vary in the proportions of the various ages of the individuals that comprise them, and such differences would in themselves tend to affect the disease occurring in each of the populations.

(See also **Age Standardization** and **Standard Population.** See **Age Standardized Mortality Rate** in the Methodology section for an example.)

AIDS

(See **HIV Disease.**)

ALCOHOL-RELATED DEATHS

Alcohol-related deaths include deaths where alcohol was a contributing factor (indirectly related) as well as those due to alcohol (directly related). Alcohol-related and drug overdose deaths are the only cause of death categories that are not based entirely upon underlying causes of death.

The ICD-10 codes for deaths due to the use or abuse of alcohol (directly related) are shown in Table 39. If any of the conditions listed as directly related to alcohol are noted on the Medical Certificate as antecedent causes giving rise to the underlying cause or as other significant conditions contributing to the death, the death is considered to be indirectly related to alcohol.

Coding practices from 1995 to 1999 may have produced over-counting of alcohol-related mortality. With the introduction of ICD-10 in 2000, more specific codes are available. Currently produced data should not be used in combination with data produced prior to 2000.

ASFR

(See **Age Specific Fertility Rate.**)

ASMR

(See **Age Standardized Mortality Rate.**)

AVERAGE AGE

The average ages of brides, grooms, and mothers of newborns in this annual report are calculated based on information provided on marriage or birth registration forms. The average ages of the population living in data dissemination areas are based on the mid-year population estimates for five-year age groups.

AVERAGE AGE POPULATION

The average age of the population is a grouped average based on the mid-year population estimates for five-year age groups. This information is provided by BCSTATS, Ministry of Citizens' Services.

BIRTH ORDER

Denotes the number position of the present birth relative to previous live births. That is, whether the live birth being counted is the 1st, 2nd, 3rd, etc. live born infant to a particular mother.

BIRTH RATE

The number of live births divided by the mid-year population and converted to a rate per 1,000 population.

BIRTH RELATED STATISTICS

The birth related statistics shown in this report include teenage mother, elderly gravida, C-section, low birth weight, and pre-term live birth rates.

BIRTH WEIGHT

The first weight of the fetus or newborn after birth. For live births this weight should be measured within the first hour of life before significant postnatal weight loss has occurred. Hospitals in BC measure weight in grams; the approximate equivalents in imperial measures are included below for comparisons to other jurisdictions. For statistical and risk assessment purposes, birth weights are grouped as:

• Low Birth Weight (LBW)	less than 2,500 grams (< 5 lb 8 oz)
• "Healthy" Weight	2,500 to 4,499 grams (5 lb 8 oz - 9 lb 15 oz)
• High Birth Weight	4,500 grams or more (> 9 lb 15 oz)

Low birth weight is sometimes further divided into these overlapping categories:

• Extremely Low Birth Weight	less than 500 grams (< 1 lb 2 oz)
• Very Low Birth Weight	less than 1,500 grams (< 3 lb 5 oz)

In recent years there has been an increasing preference to identify high birth weight as Large for Gestational Age, which is above the 90th percentile of the birth weight distribution at each gestational age.

BIRTHS

(See **Total Births.**)

BREECH

A delivery in which the buttocks or feet appear first.
See also **Mode of Delivery**.

C-SECTION

A delivery by cesarean, involving the surgical incision of the abdomen and uterine walls.
See also **Mode of Delivery**.

C-SECTION RATES

The number of live births, delivered by cesarean divided by the number of live births and converted to a rate per 1,000 live births.

CESAREAN

A delivery involving the surgical incision of the abdomen and uterine walls.
See also **Mode of Delivery**.

COMMUNITY

A geographical area defined by a municipal (city, town, village, district municipality, Indian Government district, island municipality, or resort municipality) boundary. In this report, data are only provided for incorporated communities.

CONFIDENCE INTERVAL

A measure of the variability of a statistic. A wide confidence interval indicates that the statistic is likely to fall within a wide range of values, while a narrow confidence interval indicates the statistic is likely to fall within a narrow range of values. In general, statistical confidence intervals will be wider for areas with small populations or rare events than for areas with larger populations or more common events.
(See **Statistical Tests of Significance** at the end of the Methodology section.)

CONGENITAL ANOMALIES

Physical defects that existed or date from birth.

CRUDE RATES

For live births:

The crude rate is the number of live births divided by the mid-year population and converted to a rate per 1,000 population.

For birth-related statistics (teenage mother, elderly gravida, C-section, low birth weight, and pre-term):

The rate is the number of these births divided by the number of live births and converted to a rate per 1,000 live births.

For stillbirths and perinatal deaths:

The rate is the number of stillbirths or perinatal deaths divided by the number of total births (live births plus stillbirths) and converted to a rate per 1,000 total births.

For infant deaths:

The crude rate is the number of infant deaths divided by the number of live births and converted to a rate per 1,000 live births.

For maternal deaths:

The rate is the number of maternal deaths divided by the number of live births and converted to a rate per 10,000 live births.

For deaths and mortality statistics:

The crude rate is the number of deaths divided by the mid-year population and converted to a rate per 1,000 population.

For marriages:

The crude rate is the number of marriages divided by the mid-year population and converted to a rate per 1,000 population.

DEATH RATE

The number of deaths divided by the mid-year population and converted to a rate per 1,000 population.

DEATHS DUE TO MEDICALLY TREATABLE DISEASES

(See **Medically Treatable Diseases.**)

DRUG-INDUCED DEATHS

Deaths due to drug-induced causes. This category of deaths excludes unintentional injuries, homicides, and other causes that could be indirectly related to drug use. Deaths directly due to alcohol are also excluded. The causes of death classified as being drug-induced (shown in Table 44 with their ICD-10 codes) are based on those used by the National Center for Health Statistics.[1]

DRUG OVERDOSE DEATHS

Deaths where the underlying cause of death was determined to be unintentional poisoning by illicit/illegal drugs. These deaths are a small portion of the deaths due to unintentional poisoning by drugs, and exclude accidental poisoning by drugs in therapeutic use. Deaths due to conditions that may arise from substance abuse, such as Hepatitis 'B' and 'C' and HIV, are also excluded.

Drug overdose deaths can be divided according to drug type: heroin/morphine, methadone, cocaine, psychostimulants including "crystal meth" (methamphetamine hydrochloride) and "ecstasy" (methylenedioxymethamphetamine), and other mixed drugs. The ICD-10 codes for these deaths are shown in Table 46. It should be noted that specified drug (nature of injury) codes must also be listed on the Medical Certificate for the death to be considered a drug overdose.

EARLY NEONATAL DEATH

Death of a child under seven days of age.

See also **Infant Death**.

ELDERLY GRAVIDA

Any woman who was 35 years of age or older at the time of delivery of a live born infant.

ELDERLY GRAVIDA RATE

The number of live births delivered by women aged 35 years or older divided by the number of live births and converted to a rate per 1,000 live births.

EXPECTED CESAREAN BIRTHS

The number of live births delivered by cesarean section that would be expected to be born to residents of a sub-provincial geographic area, based on the C-section rate for the province as a whole and the number of births in the sub-provincial geographic area.

(See **Observed versus Expected Ratio** in the Methodology section for an example.)

EXPECTED DEATHS

The number of deaths expected for residents of a sub-provincial geographic area, based on the age specific mortality rates for the province as a whole and the population age structure of the sub-provincial geographic area. (See **Standardized Mortality Ratio** in the Methodology section for an example.)

EXPECTED LOW BIRTH WEIGHT

The number of live births with low birth weight (less than 2,500 grams) that would be expected to be born to residents of a sub-provincial geographic area, based on the low birth weight rate for the province as a whole and the number of live births in the sub-provincial geographic area.

(See **Observed versus Expected Ratio** in the Methodology section for an example.)

EXPECTED MATERNAL COMPLICATIONS

The number of live births with maternal complications that would be expected to be born to residents of a sub-provincial geographic area, based on the complication rate for the province as a whole and the number of live births in the sub-provincial geographic area.

(See **Observed versus Expected Ratio** in the Methodology section for an example.)

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[1] National Center for Health Statistics (1993). Technical notes. Monthly Vital Statistics Report. 41 (Suppl. 7), 48.

EXPECTED PERINATAL COMPLICATIONS

The number of live births with perinatal conditions that would be expected to be born to residents of a sub-provincial geographic area, based on the rate of those conditions for the province as a whole and the number of live births in the sub-provincial geographic area.

(See **Observed versus Expected Ratio** in the Methodology section for an example.)

EXPECTED POTENTIAL YEARS OF LIFE LOST

The number of potential years of life lost (to age 75 in this report) expected for residents of a sub-provincial geographic area based on the age specific mortality rates for the province as a whole and the population age structure of the sub-provincial geographic area.

(See **Potential Years of Life Lost Index** in the Methodology section for an example.)

EXTREMELY LOW BIRTH WEIGHT

A birth weight of less than 500 grams.

See also **Birth Weight**.

EXTREMELY PREMATURE

A gestational age of less than 28 weeks.

See also **Gestational Age**.

FERTILTIY RATE

The number of live births occurring in a given time period divided by the number of women of childbearing age for residents of a geographic area. BC rates are per 1,000 women aged 15 to 44; Canadian rates are per 1,000 women aged 15 to 49.

See also **Total Fertility Rate**.

FORCEPS

An assisted delivery employing forceps.

See also **Mode of Delivery**.

GESTATIONAL AGE

Fetal age or duration of pregnancy measured from the first day of the last normal menstrual period. Gestational age is expressed in completed days or completed weeks (e.g., events occurring 280 to 286 days after the onset of the last normal menstrual period are considered to have occurred at 40 weeks of gestation).

Measurements of fetal growth, as they represent continuous variables, are expressed in relation to a specific week of gestational age as follows:

• Pre-term	gestational age less than 37 weeks
• Term	gestational age of 37 to 41 weeks
• Post-term	gestational age of 42 weeks or more

Pre-term births can be further divided as follows:

• Extremely premature	gestational age of less than 28 weeks
• Moderately premature	gestational age of 28 to 36 weeks

HA

(See **Health Authority**.)

HEALTH AUTHORITY (HA)

A geographic subdivision of the province used by the Ministry of Health Services for administrative and data dissemination purposes. There are five health authorities plus the provincial HA. Health authorities can be subdivided into 16 Health Service Delivery Areas (HSDAs) or 89 Local Health Areas (LHAs). See Figure 2 for a map of the province by HAs.

HEALTH SERVICE DELIVERY AREA (HSDA)

A geographic subdivision of the province used by the Ministry of Health Services for data dissemination purposes. The 16 Health Service Delivery Areas can be aggregated into the five Health Authorities (HAs) plus the provincial HA, or subdivided into 89 Local Health Areas (LHAs). See Figure 2 for a map of the province by HSDAs.

"HEALTHY" WEIGHT

A birth weight of 2,500 to 4,499 grams.
See also **Birth Weight**.

HIGH BIRTH WEIGHT

A birth weight of 4,500 grams or more.
See also **Birth Weight**.

HIV DISEASE

In 1987, the World Health Organization added new codes to the International Classification of Diseases (ICD) to identify Acquired Immunodeficiency Syndrome (AIDS) and Human Immunodeficiency Virus (HIV). In ICD-10, these conditions are coded to B20–B24 and are called HIV disease.

HSDA

(See **Health Service Delivery Area.**)

HUMAN IMMUNODEFICIENCY VIRUS (HIV)

The virus that causes HIV disease.

ICD-9 CODES

The World Health Organization's International Classification of Diseases, Ninth Revision. This version of ICD was used by the BC Vital Statistics Agency for coding birth complications and causes of death from 1979 until 1999. Translation tables were developed and extensive manual reviews conducted in order to recode causes of death from ICD-9 to ICD-10, permitting direct comparison of cause of death trends including deaths from 1999 and earlier that were originally coded in ICD-9.

ICD-10 CODES

The World Health Organization's International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, implemented by the BC Vital Statistics Agency on January 1, 2000. The Preamble to Appendix 2 presents a summary of ICD-10 codes.

INFANT DEATH

Death of a child under one year of age. These deaths are divided according to age at death because of the high mortality rates that occur in the periods soon after birth and because different environmental factors underlie the cause of death in the different time periods.

• Neonatal death	death of children less than 28 days after birth
• Post neonatal death	death of children from 28 to 364 days after birth

Neonatal deaths are further divided as follows:

• Early neonatal death	death of children less than 7 days after birth
• Late neonatal death	death of children from 7 to 27 days after birth

INFANT MORTALITY RATE

The number of deaths of children under one year of age expressed as a rate per 1,000 live births. The infant mortality rate is an internationally accepted indicator of the health status of a population.

LATE NEONATAL DEATH

Death of a child from 7 to 27 days of age.
See also **Infant Death.**

LBW

(See **Low Birth Weight.**)

LHA

(See **Local Health Area.**)

LIFE EXPECTANCY

Life expectancy at birth represents the mean number of years a birth cohort (persons born in the same year) may expect to live given the present mortality experience of a population. The life expectancy for a population is a summary measure that reflects the mortality rates for all ages combined, weighted in accordance with a life-table population structure. Life expectancy is an internationally accepted indicator of the health status of a population. Life expectancy is provided by BCSTATS, Ministry of Citizens' Services.

LIVE BIRTH

The *Vital Statistics Act* defines a live birth as "The complete expulsion or extraction from its mother, irrespective of the duration of the pregnancy, of a product of conception in which, after the expulsion or extraction, there is:

(a) breathing;
(b) beating of the heart;
(c) pulsation of the umbilical cord; or
(d) unmistakable movement of voluntary muscle, whether or not the umbilical cord has been cut or the placenta attached."

LIVE BIRTH RATE

The number of live births divided by the mid-year population and converted to a rate per 1,000 population.

LOCAL HEALTH AREA (LHA)

A geographic subdivision of the province used by the Ministry of Health Services for data dissemination purposes. The 89 local health areas can be aggregated into 16 Health Service Delivery Areas (HSDAs) or five Health Authorities (HAs) plus the provincial HA. See Figure 1 for a map of the province by LHAs.

LOW BIRTH WEIGHT (LBW)

A birth weight of less than 2,500 grams. Low birth weight babies have increased risks of morbidity and premature death.
See also **Birth Weight**.

LOW BIRTH WEIGHT RATE

The number of low birth weight live born babies per 1,000 live births.

MARRIAGE RATE

The number of marriages divided by the mid-year population and converted to a rate per 1,000 population.

MATERNAL DEATH

Death of a woman while pregnant or within 42 days of termination of pregnancy from causes related to the pregnancy, but not from accidental or incidental causes.

MATERNAL DEATH RATE

The number of maternal deaths divided by the number of live births and converted to a rate per 10,000 live births.

MEDICALLY TREATABLE DISEASES, DEATHS DUE TO

Deaths due to medically treatable diseases are based on Charlton's[2] classification. The disease categories are ones for which mortality could potentially have been avoided through appropriate medical intervention. It should be noted that the causes are considered to have been medically treatable only if the death occurred to persons within a specified age range (see footnotes to Table 37).

The incidence of deaths from medically treatable diseases can be used by public health professionals as a way of monitoring the effect of health promotion programs.

MODE OF DELIVERY

The modes of delivery presented in this report consist of cesarean, forceps, spontaneous breech, spontaneous vertex, and vacuum (or suction).

Cesarean:
A delivery involving the surgical incision of the abdomen and uterine walls.

Forceps:
An assisted delivery employing forceps.

Spontaneous Breech:
An unassisted (spontaneous) delivery in which the buttocks or feet of the fetus appear first.

Spontaneous Vertex:
An unassisted (spontaneous) delivery in which the head of the fetus appears first.

Vacuum:
An assisted delivery employing suction or vacuum.

MODERATELY PREMATURE

A gestational age of 28 to 36 weeks.
See also **Gestational Age**.

MVA DEATHS

Motor Vehicle Accidental Deaths.

NATURAL POPULATION INCREASE (NPI)

The component increase in a population due to the number of live births less deaths; also called Natural Population Growth. This increase is often expressed as a rate, such as per 1,000 population. It does not include increases due to immigration or decreases due to emigration.

NEONATAL DEATH

Death of a child under 28 days of age.
See also **Infant Death**.

NPI

(See **Natural Population Increase.**)

OBSERVED DEATHS

The actual number of deaths that occurred to residents of a sub-provincial geographic area in a specified time period.

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[2] Charlton, J.R.H. (1987). Avoidable Deaths and Diseases as Monitors of Health Promotion. In T. Abelin, Z.J. Brzezinski, & V. Carstairs (Eds.), ***Measurement in Health Promotion and Protection*** (pp.467-479). Copenhagen, Denmark: World Health Organization, Regional Office for Europe.

OBSERVED LOW BIRTH WEIGHT LIVE BIRTHS

The actual number of low birth weight live births that occurred to residents of a sub-provincial geographic area in a specified time period.

OBSERVED MATERNAL COMPLICATIONS

The actual number of maternal complications that occurred to residents of a sub-provincial geographic area in a specified time period.

OBSERVED PERINATAL CONDITIONS

The actual number of perinatal conditions that occurred to residents of a sub-provincial geographic area in a specified time period.

OBSERVED PYLL

The actual number of potential years of life lost (to age 75) from deaths that occurred to residents of a sub-provincial geographic area in a specified time period.

OUT-OF-WEDLOCK BIRTHS

Births where the mother of the baby is not lawfully married to the father of the baby.

OVERDOSE DEATHS

(See **Drug Overdose Deaths.**)

P-VALUE

The probability of rejecting the null hypothesis when a specified test procedure is used on a given data set. The data are statistically significant when the null hypothesis is rejected and not significant otherwise.
(See **Statistical Test** in the Methodology section for examples.)

PERINATAL

Pertaining to or occurring in the period shortly before, during and after birth, starting at 22 completed weeks of gestation and ending seven completed days after birth.

PERINATAL DEATH RATE

The number of perinatal deaths divided by the number of total births (live births plus stillbirths) and converted to a rate per 1,000 total births.

POPULATION

Mid-year population estimates used in the preparation of this report were obtained from BC STATS, Ministry of Citizens' Services.

POST MATURE

(See **Post-Term.**)

POST NEONATAL DEATH

Death of a child between the ages of 28 days and 364 days.
See also **Infant Death**.

POST TERM

A gestational age of 42 weeks or more.
See also **Gestational Age**.

POTENTIAL YEARS OF LIFE LOST (PYLL)

The number of years of life lost when a person dies before a specified age (75 years). In this report, all deaths are assumed to occur at the midpoint of five-year age groups.
(See **Potential Years of Life Lost (PYLL)** in the Methodology section for an example.)

PREMATURE

(See **Pre-Term.**)

PRE-TERM

A gestational age less than 37 weeks.
See also **Gestational Age**.

PRE-TERM RATE

The number of pre-term live births divided by the number of live births and converted to a rate per 1,000 live births.

PYLL INDEX (PYLLI)

The ratio of an area's observed PYLL to its expected PYLL. This is a health status indicator.
(See **Potential Years of Life Lost Index (PYLLI)** in the Methodology section for an example.)

PYLL STANDARD RATE (PYLLSR)

An age-standardized measure of an area's PYLL, expressed in terms of a rate per 1,000 population, adjusted to a standard population (1991 Canada Census). This is a health status indicator.
(See PYLLSR under **Potential Years of Life Lost (PYLL)** in the Methodology section for an example.)

PYLL

(See **Potential Years of Life Lost.**)

PYLL %

The percent of all PYLL in the age group due to a specified cause of death.

PYLLI

(See **PYLL Index.**)

PYLLSR

(See **PYLL Standardized Rate.**)

QUINTILE

A ranking is derived by dividing a group (e.g., LHAs within British Columbia) into five subgroups, each with equal numbers of LHAs. (Since there are 89 LHAs and 89 is not evenly divisible by five, there is one less LHA in the middle group.) These divisions are derived from a ranking of the group members according to the value of a measure, such as the SMR or the PYLLI.

SAM

(See **Smoking-attibutable Mortality.**)

SIDS

Sudden Infant Death Syndrome. The BC Coroners' Service (BCCS) utilizes an additional category of infant deaths referred to as "sudden unexplained death in infancy" (SUDI). An explanation of this term can be found at http://www.pssg.gov.bc.ca/coroners/child-death-review/docs/cdru-2009annualreport.pdf (see glossary).

As the World Health Organization ICD-10 classification system (upon which the statistics in this report are based) does not utilize this terminology, events classified as "SUDI" by the BCCS are herein included in the SIDS (R95.-) category, as is the usual practice followed by other provincial vital statistics agencies and Statistics Canada.

SMOKING-ATTRIBUTABLE MORTALITY (SAM)

The absence on death certifications of complete and reliable data on smoking requires the use of estimation techniques to approximate the extent of smoking-attributable deaths. Estimation methods, while not precise, may at least provide a general indication of the extent of such deaths. This report uses an estimation method based on the concept of attributable risk, which is described in the Methodology section.

Smoking-attributable deaths are derived by multiplying a smoking-attributable mortality percentage by the number of deaths aged 35+ in specified cause of death categories. These categories are comprised of selected malignant neoplasms, circulatory system diseases, and respiratory system diseases, and are listed in Table 42. (See **Smoking-Attributable Mortality** in the Methodology section for more details.)

SMR

(See **Standardized Mortality Ratio.)**

STANDARD POPULATION

A reference population of known age distribution used in the calculation of standardized indicators to adjust for variations in population age structures in different geographic areas or time periods. For SMR and PYLLI calculations the standard population is the British Columbia population for the year(s) concerned. The 1991 Canadian Census is used as the standard population in the calculation of ASMR and PYLLSR.

STANDARDIZED MORTALITY RATIO (SMR)

The ratio of the number of deaths occurring to residents of a geographic area (e.g., LHA) to the expected number of deaths in that area based on provincial age-specific mortality rates. The SMR is a good measure for comparing mortality data that are based on a small number of cases or for readily comparing mortality data by geographical area. SMR is an internationally recognized health status indicator.

See also **Age Standardization** and **Standard Population**.

(See **Standardized Mortalilty Ratio** in the Methodology section for an example.)

STILLBIRTH

Since 1986, the *Vital Statistics Act* defines a stillbirth as "The complete expulsion or extraction from its mother after at least 20 weeks of pregnancy, or after attaining a weight of at least 500 grams, of a product of conception in which, after the expulsion or extraction, there is no breathing, beating of the heart, pulsation of the umbilical cord, or unmistakable movement of voluntary muscle."

The definition of a stillbirth has changed over the years. From 1950 until July 1, 1962, the definition of a stillbirth was the birth of a viable fetus after at least 28 weeks pregnancy in which pulmonary respiration does not occur, whether death occurs before, during, or after birth. From July 1, 1962 until January 1, 1986, the definition of a stillbirth did not include the phrase "or after attaining a weight of at least 500 grams."

STILLBIRTH RATE

The number of stillbirths divided by the number of total births (live births plus stillbirths) and converted to a rate per 1,000 total births.

See also **Crude Rates**.

TEENAGE MOTHERS

Mothers less than 20 years of age.

TEENAGE MOTHER LIVE BIRTH RATE

The number of live births to teenage mothers divided by the number of live births and converted to a rate per 1,000 live births.

TERM

A gestational age of 37 to 41 weeks.

See also **Gestational Age**.

TFR

(See **Total Fertility Rate.)**

TOTAL BIRTHS

The number of live births plus stillbirths.

TOTAL FERTILITY RATE (TFR)

The number of births that a group of 1,000 women would have if, during their childbearing years, they had the age-specific birth rates observed in a given calendar year. TFR is a hypothetical measure of completed family size based on current levels of fertility by age.

(See TFR under **Fertility Rate** in the Methodology section for an example.)

TOTAL PYLL

The total number of potential years of life lost prior to an established cut-off point of 75 years.

UCOD

(See **Underlying Cause of Death.)**

UNDERLYING CAUSE OF DEATH (UCOD)

The World Health Organization defines the underlying cause of death as "(a) the disease or injury which initiated the train of events leading directly to death, or (b) the circumstances of the accident or violence which produced the fatal injury."

VACUUM

An assisted delivery employing suction or vacuum.

See also **Mode of Delivery**.

VERTEX

A delivery in which the head of the fetus appears first.

See also **Mode of Delivery**.

VERY LOW BIRTH WEIGHT

A birth weight of less than 1,500 grams.

See also **Birth Weight**.

Methodology

Methodology

Population statistics inevitably involve comparisons of sub-populations, regions, and time periods. To many, such comparisons are often too complex so that interpretation becomes a formidable task. However, those comparisons are necessary in order to understand the health status of specific populations within British Columbia. The text that accompanies the tables and figures in this report explains the basic meaning of the comparisons but, for some, a more in-depth explanation is useful and necessary.

This section provides the reader with computational examples of how various measures are calculated. All data shown in the examples are hypothetical. These routines are referenced in the discussion accompanying specific tables and figures where they are used and are arranged alphabetically. In some cases, a test of statistical significance is noted in the discussion and those routines will be found at the end of this part of the report.

Examples of the these statistical computations follow:

RATES
- Age Standardized Mortality Rate (ASMR)
- Fertility Rates
    - Total Fertility Rate (TFR)
    - Age Specific Fertility Rates (ASFRs)
- Potentional Years of Life Lost (PYLL) and Standardized Rate (PYLLSR)

RATIOS
- Observed versus Expected Ratios
    - Low Birth Weight (LBW) Live Births
    - Potential Years of Life Lost Index (PYLLI)
    - Standardized Mortality Ratio (SMR)

ESTIMATION OF SMOKING ATTRIBUTABLE MORTALITY (SAM)

STATISTICAL TESTS OF SIGNIFICANCE
- Chi-Square
- Confidence Intervals
- P-Value

RATES

- Age Standardized Mortality Rate (ASMR)

Although a hypothetical LHA is used in the example cited here, the ASMR was also calculated for yearly death data, for example Figure 16, and specific cause groups, for example Table 21, to permit comparisons between items in those tables or figures. The example shown below can be applied to those measures as well. The test of statistical significance is described under Rates in Statistical Tests of Significance at the end of this Appendix.

Age Group (i)	Standard Population (π_i)	LHA		
		Estimated Population (p_i)	Death Rate/10,000 (m_i)	Observed Deaths (d_i)
< 1	403,061	1,339	22.4	3
1 – 4	1,550,285	5,483	1.8	1
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
80 – 84	382,303	1,198	701.2	84
85 +	287,877	908	1596.9	145
TOTAL	28,120,065	81,016		561

For the Local Health Area:

$$ASMR = \frac{\Sigma m_i \times \pi_i}{\Pi} = \frac{22.4 \times 403{,}061 + \ldots + 1{,}596.9 \times 287{,}877}{28{,}120{,}065} = 46.2$$

Where: p_i =area population in age group i;
π_i =standard population in age group i;
Π $= \Sigma \pi_i$ = total standard population;
d_i =deaths in LHA population in age group i; and
m_i $= d_i / p_i \times 10{,}000$ = mortality rate per 10,000 LHA population in age group i.

e.g., $m_i = \frac{3 \times 10{,}000}{1{,}339} = 22.4$, for age group 1.

- Fertility Rates

Fertility Rates include the Total Fertility Rate (TFR) and Age Specific Fertility Rates (ASFRs). Although the TFR is calculated for a hypothetical LHA in the example cited here, the calculation method was applied to each year in Table 3 and Figure 5 and to each of the LHAs in Table 10. The teenage fertility rates shown in Table 10 and Figure 29 are the teenage-specific fertility rates, that is the ASFRs for 15-19 year olds, exemplified below.

Age Group (i)	LHA Live Births (b_i)	Female Population (w_i)	Age Specific Fertility Rate ($ASFR_i$)
15 – 19	19	598	31.8
20 – 24	46	440	104.5
25 – 29	74	498	148.6
30 – 34	51	745	68.5
35 – 39	12	690	17.4
40 – 44	2	581	3.4
TOTAL	204	3,552	374.2

For the Local Health Area:

1) the age specific fertility rate (ASFR) for age group 15–19 years is:

$$ASFR_i = \frac{b_i}{w_i} \times 1{,}000 = \frac{19}{598} \times 1{,}000 = 31.8$$

Where: b_i =number of live births for age group i; and
w_i =number of female population for age group i.

2) the total fertility rate (TFR) is:

$$TFR = a \times \Sigma ASFR_i = 5 \times (31.8 + \ldots + 3.4) = 1{,}871$$

Where: $ASFR_i$ =age specific fertility rate for age group i; and
a =number of years in each age group i.

- Potential Years of Life Lost (PYLL) and Standardized Rate (PYLLSR)

The Potential Years of Life Lost (PYLL) measures presented in this report are based on the number of years of life lost when a person dies before the age of 75 years. Infant deaths (age less than one year old) are included.

Age Group (i)	Age Factor ($75-Y_i$)	Standard Population (π_i)	LHA			
			Estimated Population (p_i)	Death Rate/1,000 (m_i)	Observed Deaths (d_i)	Observed PYLL ($d_i(75-Y_i)$)
< 1	74.5	403,061	1,339	2.2	3	223.5
1 – 4	72.0	1,550,285	5,483	0.2	1	72.0
5 – 9	67.5	1,953,045	6,553	0.2	1	67.5
.	.	.	.	.	.	.
.	.	.	.	.	.	.
.	.	.	.	.	.	.
65 – 69	7.5	1,084,588	3,538	18.7	66	495.0
70 – 74	2.5	834,024	2,779	28.8	80	200.0
TOTAL		28,120,065	79,140		239	3,183.0

For the Local Health Area:

$$PYLL = \sum d_i \times (75 - Y_i)$$

Where: d_i =number of deaths in age group i;
Y_i =age at midpoint of age group i; and
Σ =summation.

$$PYLLSR = \frac{\sum m_i \times \pi_i \times (75 - Y_i)}{\Pi} = \frac{2.2 \times 403{,}061 \times 74.5 + \ldots + 28.8 \times 834{,}024 \times 2.5}{28{,}120{,}065} = 37.0$$

Where: p_i =LHA population in age group i;
π_i =standard population in age group i;
$\Pi = \sum \pi_i$ = total standard population;
d_i =deaths in LHA population in age group i;
Y_i =age at midpoint of age group i; and
$m_i = (d_i/p_i) \times 1{,}000$ = mortality rate per 1,000 LHA population in age group i.

RATIOS

- Observed versus Expected Ratios

The following are hypothetical examples that apply to the vital event ratios shown in this report. The first example shows low birth weight (LBW) live births (less than 2,500 grams), but other live birth ratios, such as cesarean deliveries or live births with maternal or perinatal complications, as well as infant deaths ratios can be substituted. Tables 12, 16, 18, 20, and 26 and Figures 30, 32, 33, 34, and 36 present these ratios. Ratios for live births to teenage mothers, elderly gravida live births, pre-term live births, or live births by cesarean, although not shown in this report, would also be calculated the same way as the low birth weight ratios. These ratios based on live births should not be confused with observed versus expected ratios that involve age and gender standardization, such as Standardized Mortality Ratio (SMR) and Potential Years of Life Lost Index (PYLLI). The test of statistical significance is described under Ratios in Statistical Tests of Significance at the end of this Appendix.

- Low Birth Weight Live Births

Year	LHA			British Columbia	
	Low Birth Weight Live Births		Total Live Births	Low Birth Weight Live Births Observed	Total Live Births
	Observed	Expected			
(i)	(O_i)	(E_i)	(L_i)	(b_i)	(B_i)
1995	92	82.9	1,701	2,096	42,989
1996	69	74.6	1,588	1,965	41,846
1997	102	80.2	1,582	2,113	41,655
1998	85	74.7	1,495	2,145	42,913
1999	91	78.1	1,501	2,267	43,586
TOTAL	439	390.6	7,867	10,586	212,989

For the Local Health Area:

1) the expected low birth weight live births for year i = 1995 were:

$$E_i = \frac{b_i}{B_i} \times L_i = \frac{2{,}096}{42{,}989} \times 1{,}701 = 82.9$$

Where: b_i =number of LBW live births for the province in year i;
B_i =number of live births for the province in year i; and
L_i =number of live births for the LHA.

2) the ratio of observed over the expected LBW live births for the five-year period was:

$$\text{Ratio} = \frac{\Sigma O_i}{\Sigma E_i} = \frac{92 + \ldots + 91}{82.9 + \ldots + 78.1} = \frac{439}{390.6} = 1.1$$

Where: O_i =observed LBW live births for year i; and
E_i =expected LBW live births for year i.

- Potential Years of Life Lost Index (PYLLI)
Note that this method is both age and gender standardized.

Age Group	Gender	Age Factor	LHA					British Columbia			
			Estimated Population	Death Rate/1,000	Observed Deaths	Observed PYLL	Expected PYLL	Estimated Population	Death Rate/1,000	Observed Deaths	Observed PYLL
(i)	(j)	$(75-Y_{ij})$	(p_{ij})	(m_{ij})	(d_{ij})	$(d_{ij}(75-Y_{ij}))$	$(e_{ij}(75-Y_{ij}))$	(P_{ij})	$(D_{ij}/P_{ij}\times 1{,}000)$	(D_{ij})	$(D_{ij}(75-Y_{ij}))$
<1	M	74.5	1,339	2.2	3	223.5	766.3	42,700	7.7	328	24,436.0
<1	F	74.5	1,301	1.8	2	177.3	620.8	40,600	6.4	260	19,380.3
.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.
70–74	M	2.5	1,587	71.3	113	282.8	233.2	65,500	58.8	3,969	9,921.4
70–74	F	2.5	2,779	28.8	80	200.0	182.3	107,000	26.2	2,807	7,017.5
TOTAL			79,140		239	3,183.0	5,100.0	2,966,500		11,068	200,265.5

For the Local Health Area:

$$PYLLI = \frac{O}{E} = \frac{\Sigma d_{ij} \times (75 - Y_{ij})}{\Sigma e_{ij} \times (75 - Y_{ij})} = \frac{223.5 + 177.3 + \ldots + 282.8 + 200.0}{766.3 + 620.8 + \ldots + 233.2 + 182.3} = \frac{3{,}183}{5{,}100} = 0.6$$

Where: O =observed PYLL;
E =expected PYLL;
d_{ij} =observed deaths in age group i and gender j;
e_{ij} =expected deaths in age group i and gender j;
Y_{ij} =age at midpoint of age group i and gender j;
p_{ij} =LHA population for age group i and gender j;
P_{ij} =provincial population for age group i and gender j;
D_{ij} =provincial deaths for age group i and gender j.

1) Observed PYLL (O)

The number of potential years of life lost (PYLL) based on the number and age at death of deaths that occurred in the LHA. For example, for age group under one year of age and gender j, the observed PYLL are:

Observed PYLL = deaths x age factor = d_{ij} (75-Y_{ij}) = 3 x 74.5 = 223.5

2) Expected PYLL (E)

The number of potential years of life lost (PYLL) expected for residents of the LHA based on the PYLL from the expected deaths in the age group. For example, for age group under one year of age and gender j, the expected PYLL are:

Expected PYLL = expected deaths x age factor = $e_{ij}\,(75 - Y_{ij}) = \frac{D_{ij}}{P_{ij}} \times p_{ij} \times (75 - Y_{ij})$

$$= \frac{328}{42{,}700} \times 1{,}339 \times 74.5 = 766.3$$

- Standardized Mortality Ratio (SMR)

  Note that this method is both age and gender standardized.

		LHA				British Columbia		
Age Group (i)	Gender (j)	Estimated Population (p_{ij})	Death Rate/1,000 (m_{ij})	Observed Deaths (d_{ij})	Expected Deaths (e_{ij})	Estimated Population (P_{ij})	Death Rate/1,000 (M_{ij})	Observed Deaths (D_{ij})
< 1	M	1,339	2.2	3	10.3	42,700	7.7	328
< 1	F	1,301	1.8	2	8.3	40,600	6.4	260
.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.
85 +	M	1,198	70.1	84	87.2	48,100	72.8	3,502
85 +	F	908	159.7	145	138.8	34,500	152.8	5,272
TOTAL		81,016		561	595.1	3,131,700		23,389

For the Local Health Area:

$$SMR = \frac{\Sigma d_{ij}}{\Sigma e_{ii}} = \frac{3 + 2 + \ldots + 110 + 145}{10.3 + 8.3 + \ldots + 92.6 + 138.8} = \frac{561}{595.1} = 0.9$$

Where: d_{ij} =observed deaths in age group i and gender j; and
e_{ij} =expected deaths in age group i and gender j.

1) Observed Deaths (d)
The actual number of deaths that occurred in the LHA. For example, for age group under one year of age and gender j, the observed deaths are three.

2) Expected Deaths (e)
The number of deaths expected for residents of the LHA based on the age specific mortality rates for the province as a whole and the population age structure of the LHA. For age group under one year and gender j, the expected deaths are:

$$e_{ij} = \frac{D_{ij}}{P_{ij}} \times p_{ij} = \frac{328}{42{,}700} \times 1{,}339 = 10.3$$

Where: p_{ij} =LHA population for age group i and gender j;
D_{ij} =provincial deaths for age group i and gender j; and
P_{ij} =provincial population for age group i and gender j.

- Estimation of Smoking Attributable Mortality (SAM)

This report uses an estimation method to approximate the extent of smoking-attributable deaths based on the concept of attributable risk. To define attributable risk mathematically, consider d_0 and d_1 respectively to represent the death rates, in a given time period, in two cohorts from a population — those not exposed and those exposed to a given risk factor. The attributable risk of this factor, AR_1, would then be:

$$AR_1 = \frac{d_1 - d_0}{d_1} = \frac{r_1 - 1}{r_1}$$

Where: $r_1 = d_1/d_0$ is the relative risk of the exposed cohort.

The relative risk of the unexposed cohort is $r_0 = 1$; the attributable risk of this cohort is $AR_0 = 0$.

The attributable risk (AR) for the population as a whole (exposed plus unexposed cohorts) is given by:

$$AR = \frac{p_1 (r_1 - 1)}{p_1 (r_1) + (1 - p_1)(r_0)} = \frac{(p_1)(r_1 - 1)}{(p_1)(r_1 - 1) + 1}$$

Where: p_1 = the proportion or fraction of the population exposed to the risk factor; and
$1\text{-}p_1$ = the proportion or fraction of the population not exposed to the risk factor.

This may be extended to account for multiple levels of exposure, as follows:

$$AR = \frac{\sum_{i=1}^{n} p_i (r_i - 1)}{\sum_{i=1}^{n} p_i (r_i - 1) + 1}$$

Where: p_i = the proportion (prevelance) of the population in the ith level of exposure group;
r_i = the relative risk at the ith level of exposure; and
i = the ith risk category.

When applied to smoking-attributable mortality (SAM), the attributable risk is often expressed as a percentage:
SAM (%) = AR x 100

Smoking-attributable deaths are derived by multiplying the smoking-attributable mortality percentage expressed as a decimal fraction by the number of deaths aged 35+ in each of 19 specified cause of death categories. These categories are comprised of selected malignant neoplasms, circulatory system diseases, and respiratory system diseases, and are listed in the Glossary.

Relative-risk data from the American Society's Cancer Prevention Study (CPS-II) 1982–1988[1] were selected for use, as they have been widely used for similar analyses. The data from CPS–II established the age groups and the classification of smokers (current, former, and never) for which smoking prevalence data were required. The relative risk age categories were for 35+, or 35-64 and 65+. BC prevalence rates for smoking were provided in the **Tobacco Use in B.C. (1997)** survey commissioned by the BC and Yukon Health and Stroke Foundation.[2]

STATISTICAL TESTS OF SIGNIFICANCE

- Chi Square

For ratios, such as SMRs, a Chi-square (χ^2) test is applied to determine whether the observed number of cases is statistically significantly different from the expected number. For LHA *l*:

$$\chi_l^2 = \frac{(O_l - E_l)^2}{E_l}$$

(with one degree of freedom).

Where: O_l =Observed number for LHA *l*; and
E_l =Expected number for LHA *l*.

If $\chi_l^2 > 3.84$, the ratio is statistically significant at 5% significance level.

For SMR values, the Chi-square statistic that is applied is:

$$X_l^2 = 9\hat{O}_l\left(1 - \frac{1}{9\hat{O}_l} - \left(\frac{E_l}{\hat{O}_l}\right)^{1/3}\right)^2$$

Where: $\hat{O}_l$ $= O_l$ *if* $O_l > E_l$*; otherwise*
$\hat{O}_l$ $= O_l + 1.$

- Confidence Intervals

For rates, such as ASMRs, the test employed to determine statistical significance is a confidence interval. The 95% confidence interval for the difference (D) between a LHA and a provincial rate is defined by the upper and lower limits of the interval as follows:

$$\textit{Lower Limit} = D - 1.96\sqrt{\frac{R_l^2}{O_l} + \frac{R_p^2}{O_p}}$$

$$\textit{Upper Limit} = D + 1.96\sqrt{\frac{R_l^2}{O_l} + \frac{R_p^2}{O_p}}$$

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[1] Centres for Disease Control. (1990). Smoking and health: A national status report. (DHSS publication no. (CDC) 87-8396). 2nd Edition. Rockville, MD: U.S. Department of Health and Human Services.

[2] Tobacco Use in B.C., ANGUS REID GROUP survey results, September 1997.

Where: R_l =Rate for LHA *l*;
R_p =Rate for the province;
O_l =Observed number for LHA *l*; and
O_p =Observed number for the province.

If the Lower Limit > 0, then R_l is statistically significantly higher than R_p;
if the Upper Limit < 0, then R_l is statistically significantly lower than R_p; otherwise,
there is no statistically significant difference.

- P Value

The p-value is the probability of rejecting the null hypothesis when a specified test procedure is used on a given data set. This probability is the smallest level of significance at which the null hypothesis would be rejected. Once the p-value has been determined, the conclusion at any particular level α results from comparing the p-value to α (e.g., 0.05):

(a) p-value $\leq \alpha$ ➔ reject null hypothesis at level α,

(b) p-value $> \alpha$ ➔ do not reject the null hypothesis at level α,

and we call the data statistically significant when the null hypothesis is rejected and not significant otherwise.

Appendix One

Statistical Summaries by Health Authority, Health Service Delivery Area, Local Health Area and Community

British Columbia, 2009

Preamble to Appendix 1

British Columbia is a large, geographically diverse province. The majority of the population is concentrated in the south-western corner of the province, with the majority of the remaining population concentrated in the major cities of Kelowna, Kamloops, Prince George, and Nanaimo, or along the border with the United States. Large areas of the province are sparsely populated. Health care services tend to be concentrated in the areas of greater population, especially in the metropolitan areas of Vancouver and Victoria.

Appendix 1 provides summary details of the 2009 vital statistics for HAs, HSDAs, LHAs, and incorporated communities. The LHAs are the lowest level of data aggregation; they are the building blocks upon which the HSDA and HA information is aggregated. Information presented in this appendix includes the number of live births, stillbirths, and deaths by gender, and the number of marriages. Live births and stillbirths are assigned to geographic areas based on usual residence of the mother. Deaths are assigned to geographic areas based on the usual residence of the decedent. Marriages are assigned to geographic areas based on the place where the marriage ceremony was performed and include non-residents.

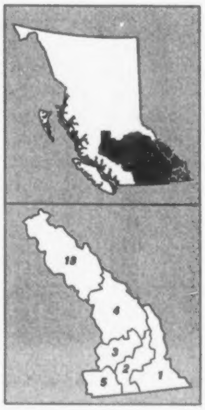
Population estimates, average age, and life expectancy at birth were obtained from BC STATS, Ministry of Citizens' Services.

APPENDIX 1

STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA AND COMMUNITY

BRITISH COLUMBIA, 2009

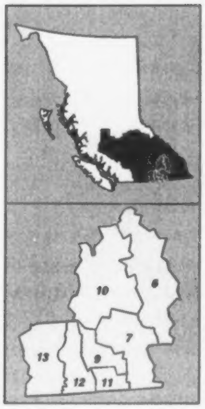
Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type†	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	Life Expectancy (2005-2009)
HSDA 11 EAST KOOTENAY									
LHA 001 Fernie		M	7,726	88	43		-	39.4	77.8
		F	7,167	78	51		-	39.7	X *
		T	14,893	166	94	113	-	39.6	80.7
Elkford	DM	M		20	4		-		
		F		9	4		-		
		T	2,591	29	8	10	-		
Fernie	C	M		32	21		-		
		F		28	32		-		
		T	4,415	60	53	52	-		
Sparwood	DM	M		11	10		-		
		F		20	7		-		
		T	3,804	31	17	8	-		
LHA 002 Cranbrook		M	12,670	124	117		-	40.5	77.4
		F	13,083	133	120		2	42.0	82.6
		T	25,753	257	237	179	2	41.2	80.0
Cranbrook	C	M		99	100		-		
		F		117	105		2		
		T	19,161	216	205	93	2		
LHA 003 Kimberley		M	4,278	35	54		1	43.5	80.1
		F	4,307	48	42		-	44.6	81.2
		T	8,585	83	96	46	1	44.1	80.8
Kimberley	C	M		34	47		1		
		F		41	35		-		
		T	6,705	75	82	35	1		
LHA 004 Windermere		M	5,393	54	29		-	40.4	83.6 *
		F	5,329	47	18		-	40.8	X *
		T	10,722	101	47	108	-	40.6	84.7
Canal Flats	VL	M		7	3		-		
		F		4			-		
		T	817	11	3	5	-		
Invermere	DM	M		30	14		-		
		F		19	11		-		
		T	3,668	49	25	24	-		
Radium Hot Springs	VL	M		5	4		-		
		F		6	1		-		
		T	1,005	11	5	11	-		
LHA 005 Creston		M	6,136	59	89		-	44.5	76.9
		F	6,533	76	72		-	45.6	83.5 *
		T	12,669	135	161	58	-	45.1	80.1
Creston	T	M		28	56		-		
		F		34	51		-		
		T	5,246	62	107	27	-		
LHA 018 Golden		M	3,871	26	29		-	38.4	78.4 *
		F	3,503	29	10		1	39.1	82.7
		T	7,374	55	39	140	1	38.8	80.4
Golden	T	M		21	26		-		
		F		25	7		1		
		T	3,959	46	33	70	1		
TOTAL		M	40,074	386	361		1	41.0	78.5
		F	39,922	411	313		3	42.0	83.3
		T	79,996	797	674	644	4	41.5	80.8



APPENDIX 1 – *continued*

STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA AND COMMUNITY

BRITISH COLUMBIA, 2009



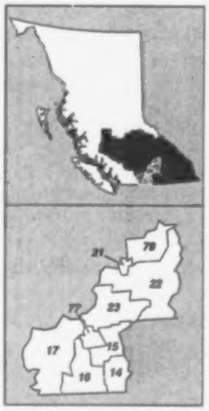
Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type†	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	Life Expectancy (2005-2009)
HSDA 12 KOOTENAY BOUNDARY									
LHA 006 Kootenay Lake		M	1,954	14	16		-	44.0	78.7 *
		F	1,894	8	13		-	45.1	X *
		T	3,848	22	29	40	-	44.5	81.5
Kaslo	VL	M		10	11		-		
		F		2	9		-		
		T	1,184	12	20	15	-		
LHA 007 Nelson		M	12,611	136	100		-	40.4	79.2
		F	12,509	110	90		-	42.0	82.8
		T	25,120	246	190	190	-	41.2	81.0
Nelson	C	M		63	51		-		
		F		45	63		-		
		T	9,938	108	114	97	-		
Salmo	VL	M		9	14		-		
		F		9	4		-		
		T	1,060	18	18	10	-		
Slocan	VL	M		4	1		-		
		F		1	4		-		
		T	391	5	5	11	-		
LHA 009 Castlegar		M	6,739	43	47		-	41.4	77.4
		F	6,706	41	60		-	43.0	80.8
		T	13,445	84	107	46	-	42.2	79.1
Castlegar	C	M		25	29		-		
		F		29	47		-		
		T	7,871	54	76	28	-		
LHA 010 Arrow Lakes		M	2,384	13	21		-	45.4	78.3
		F	2,397	11	16		-	46. 0	X *
		T	4,781	24	37	38	-	45.7	80.5
Nakusp	VL	M		7	11		-		
		F		3	6		-		
		T	1,530	10	17	20	-		
New Denver	VL	M		4	2		-		
		F		4	5		-		
		T	516	8	7	9	-		
Silverton	VL	M		1	2		-		
		F					-		
		T	202	1	2	4	-		
LHA 011 Trail		M	9,512	77	106		-	42.5	76.1
		F	9,866	85	126		2	44.6	80.7
		T	19,378	162	232	93	2	43.6	78.4
Fruitvale	VL	M		19	15		-		
		F		13	11		-		
		T	2,031	32	26	15	-		
Montrose	VL	M		2	3		-		
		F		9	1		-		
		T	1,043	11	4	2	-		
Rossland	C	M		22	10		-		
		F		17	6		-		
		T	3,532	39	16	21	-		
Trail	C	M		26	69		-		
		F		33	91		2		
		T	7,353	59	160	42	2		
Warfield	VL	M		6	5		-		
		F		8	12		-		
		T	1,811	14	17	3	-		

APPENDIX 1 – *continued*

STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA AND COMMUNITY

BRITISH COLUMBIA, 2009

Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type†	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	Life Expectancy (2005-2009)
LHA 012 Grand Forks		M	4,484	31	57		-	45.0	76.2
		F	4,552	21	51		-	47.3	81.5 *
		T	9,036	52	108	49	-	46.2	78.8
Grand Forks	C	M		27	49		-		
		F		17	45		-		
		T	4,150	44	94	29	-		
LHA 013 Kettle Valley		M	1,910	5	16		-	46.6	X *
		F	1,787	7	7		-	45.6	X *
		T	3,697	12	23	13	-	46.1	X *
Greenwood	C	M		1	4		-		
		F		3	1		-		
		T	676	4	5	3	-		
Midway	VL	M		3	5		-		
		F			2		-		
		T	658	3	7	2	-		
TOTAL		**M**	**39,594**	**319**	**363**		**-**	**42.4**	**77.7**
		F	**39,711**	**283**	**363**		**2**	**44.0**	**82.0**
		T	**79,305**	**602**	**726**	**469**	**2**	**43.2**	**79.9**
HSDA	**13**	**OKANAGAN**							
LHA 014 Southern Okanagan		M	9,671	59	149		-	48.1	76.7
		F	10,144	58	114		-	50.4	83.7
		T	19,815	117	263	143	2	49.3	80.1
Oliver	T	M		30	75		-		
		F		25	72		-		
		T	4,783	55	147	47	2		
Osoyoos	T	M		15	42		-		
		F		8	31		-		
		T	5,189	23	73	48	-		
LHA 015 Penticton		M	19,964	161	319		-	44.8	77.4
		F	21,684	173	255		1	47.3	82.5
		T	41,648	334	574	268	1	46.1	80.0
Penticton	C	M		135	286		-		
		F		154	237		-		
		T	33,250	289	523	171	-		
LHA 016 Keremeos		M	2,574	21	41		2	48.0	73.0
		F	2,668	18	24		1	48.3	X *
		T	5,242	39	65	17	4	48.2	77.5
Keremeos	VL	M		15	29		1		
		F		9	17		1		
		T	1,479	24	46	10	2		
LHA 017 Princeton		M	2,553	9	30		-	49.1	77.5 *
		F	2,506	13	29		-	48.3	79.1
		T	5,059	22	59	34	-	48.7	78.4
Princeton	T	M		9	29		-		
		F		13	26		-		
		T	2,757	22	55	21	-		
LHA 021 Armstrong - Spallumcheen		M	4,729	45	46		1	42.3	79.6
		F	4,950	31	36		-	43.9	83.7 *
		T	9,679	76	82	46	1	43.1	81.6
Armstrong	C	M		34	34		1		
		F		22	30		-		
		T	4,533	56	64	33	1		
Spallumcheen	DM	M		11	12		-		
		F		9	6		-		
		T	5,128	20	18	13	-		



Appendix 1 – *continued*

STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA AND COMMUNITY

British Columbia, 2009

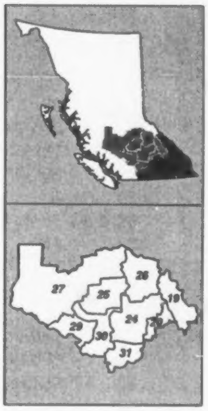
Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type*	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	Life Expectancy (2005-2009)
LHA 022 Vernon		M	32,181	324	310		3	42.1	77.9
		F	33,696	325	309		-	44.1	82.6
		T	65,877	649	619	351	5	43.1	80.3
Coldstream	DM	M		41	32		-		
		F		36	25		-		
		T	10,388	77	57	67	-		
Lumby	VL	M		29	21		1		
		F		30	21		-		
		T	1,804	59	42	24	1		
Vernon	C	M		203	228		1		
		F		215	238		-		
		T	38,968	418	466	200	2		
LHA 023 Central Okanagan		M	90,751	840	796		7	41.0	79.4
		F	93,528	854	755		8	43.0	83.7
		T	184,279	1,694	1,551	1,041	15	42.0	81.5
Kelowna	C	M		566	531		4		
		F		576	558		8		
		T	120,812	1,142	1,089	783	12		
Lake Country	DM	M		56	33		2		
		F		44	31		-		
		T	11,409	100	64	88	2		
Peachland	DM	M		21	17		-		
		F		26	22		-		
		T	5,244	47	39	25	-		
LHA 077 Summerland		M	5,588	36	69		-	46.2	79.6
		F	6,118	41	64		-	47.7	X *
		T	11,706	77	133	97	-	47.0	82.3
Summerland	DM	M		36	69		-		
		F		41	64		-		
		T	11,243	77	133	97	-		
LHA 078 Enderby		M	3,813	42	38		-	43.2	76.1
		F	3,827	33	30		-	43.3	81.3 *
		T	7,640	75	68	42	-	43.2	78.6
Enderby	C	M		39	35		-		
		F		31	29		-		
		T	2,906	70	64	35	-		
TOTAL		M	171,824	1,537	1,798		13	42.5	78.5
		F	179,121	1,546	1,616		10	44.5	83.3
		T	350,945	3,083	3,414	2,039	28	43.5	80.9
HSDA 14 THOMPSON CARIBOO SHUSWAP									
LHA 019 Revelstoke		M	4,023	45	30		-	39.8	79.3 *
		F	3,905	43	32		-	41.4	X *
		T	7,928	88	62	56	-	40.6	81.3 *
Revelstoke	C	M		45	30		-		
		F		43	32		-		
		T	7,267	88	62	56	-		
LHA 020 Salmon Arm		M	17,178	130	182		-	44.3	77.1
		F	17,736	134	160		2	45.5	83.3
		T	34,914	264	342	196	2	44.9	80.2

APPENDIX 1 – *continued*

STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA AND COMMUNITY

BRITISH COLUMBIA, 2009

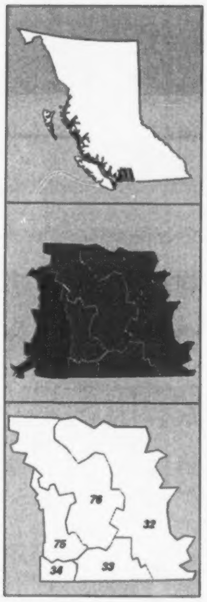
Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type†	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	Life Expectancy (2005-2009)
Salmon Arm	C	M		80	109		-		
		F		83	111		2		
		T	17,220	163	220	108	2		
Sicamous	DM	M		6	13		-		
		F		5	8		-		
		T	2,950	11	21	15	-		
LHA 024 Kamloops		M	55,064	591	484		4	40.3	77.9
		F	55,782	505	356		1	41.6	82.3
		T	110,846	1,096	840	578	5	40.9	80.1
Chase	VL	M		18	25		-		
		F		15	16		-		
		T	2,478	33	41	56	-		
Kamloops	C	M		504	386		3		
		F		417	295		1		
		T	87,017	921	681	385	4		
Logan Lake	DM	M		6	9		-		
		F		12	7		-		
		T	2,189	18	16	9	-		
LHA 025 100 Mile House		M	7,519	50	75		1	44.7	76.9
		F	7,237	60	67		-	44.5	81.2
		T	14,756	110	142	84	1	44.6	78.9
100 Mile House	DM	M		28	29		-		
		F		25	40		-		
		T	1,941	53	69	39	-		
LHA 026 North Thompson		M	2,174	24	16		-	42.0	73.3
		F	2,135	20	19		-	41.2	X *
		T	4,309	44	35	21	-	41.6	76.5
LHA 027 Cariboo - Chilcotin		M	13,632	143	112		1	39.1	76.0
		F	13,098	139	94		1	39.5	80.8
		T	26,730	282	206	110	2	39.3	78.3
Williams Lake	C	M		67	53		1		
		F		61	61		1		
		T	11,090	128	114	44	2		
LHA 029 Lillooet		M	2,285	18	24		-	39.8	74.8 *
		F	2,140	19	24		-	40.9	77.5 *
		T	4,425	37	48	14	-	40.4	76.0
Lillooet	DM	M		14	24		-		
		F		14	22		-		
		T	2,367	28	46	12	-		
LHA 030 South Cariboo		M	3,766	30	39		1	43.5	75.0
		F	3,647	32	38		-	43.3	79.4
		T	7,413	62	77	39	1	43.4	77.2
Ashcroft	VL	M		9	12		1		
		F		11	10		-		
		T	1,740	20	22	12	1		
Cache Creek	VL	M		10	12		-		
		F		6	12		-		
		T	1,083	16	24	11	-		
Clinton	VL	M		5	5		-		
		F		3	6		-		
		T	597	8	11	5	-		
Lytton	VL	M		6	5		-		
		F		12	7		-		
		T	226	18	12	9	-		



Appendix 1 – *continued*

STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA AND COMMUNITY

British Columbia, 2009



Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type†	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	Life Expectancy (2005-2009)
LHA 031 Merritt		M	5,902	69	57		1	40.4	73.9
		F	5,816	61	45		-	41.1	79.9
		T	11,718	130	102	47	1	40.7	76.7
Merritt	C	M		55	45		-		
		F		52	41		-		
		T	7,450	107	86	35	-		
TOTAL		**M**	**111,543**	**1,100**	**1,019**		**8**	**41.2**	**77.2**
		F	**111,496**	**1,013**	**835**		**4**	**42.2**	**81.9**
		T	**223,039**	**2,113**	**1,854**	**1,145**	**12**	**41.7**	**79.5**
HA 01 INTERIOR TOTAL		**M**	**363,035**	**3,342**	**3,541**		**22**	**41.9**	**78.0**
		F	**370,250**	**3,253**	**3,127**		**19**	**43.5**	**82.8**
		T	**733,285**	**6,595**	**6,668**	**4,297**	**46**	**42.7**	**80.4**
HSDA 21 FRASER EAST									
LHA 032 Hope		M	4,078	53	55		1	44.1	73.6
		F	3,987	36	48		-	44.3	77.1
		T	8,065	89	103	34	1	44.2	75.2
LHA 032 Hope		M	4,150	35	60		1	43.5	74.1
		F	4,055	34	41		1	44.0	76.9
		T	8,205	69	101	33	3	43.7	75.5
Hope	DM	M		30	52		1		
		F		29	38		1		
		T	6,269	59	90	29	3		
LHA 033 Chilliwack		M	41,908	563	376		4	38.7	77.5
		F	42,716	520	365		4	40.5	82.1
		T	84,624	1,083	741	505	9	39.6	79.8
Chilliwack	C	M		519	329		3		
		F		479	335		4		
		T	76,106	998	664	380	8		
LHA 034 Abbotsford		M	68,202	913	468		7	36.6	78.8
		F	67,754	852	443		18	38.8	83.5
		T	135,956	1,765	911	493	26	37.7	81.2
Abbotsford	C	M		912	465		7		
		F		852	443		18		
		T	135,866	1,764	908	493	26		
LHA 075 Mission		M	21,686	227	134		4	37.0	76.7
		F	20,531	227	127		1	38.4	81.1
		T	42,217	454	261	182	6	37.7	78.8
Mission	DM	M		212	121		2		
		F		210	120		1		
		T	37,167	422	241	163	4		
LHA 076 Agassiz - Harrison		M	4,527	46	36		-	41.2	79.1
		F	4,464	52	41		1	42.1	84.2
		T	8,991	98	77	132	1	41.6	81.5
Harrison Hot Springs	VL	M		4	4		-		
		F		5	8		-		
		T	1,594	9	12	69	-		
Kent	DM	M		42	32		-		
		F		47	33		1		
		T	5,515	89	65	63	1		
TOTAL		**M**	**140,473**	**1,784**	**1,074**		**16**	**37.6**	**77.9**
		F	**139,520**	**1,685**	**1,017**		**25**	**39.5**	**82.5**
		T	**279,993**	**3,469**	**2,091**	**1,345**	**45**	**38.6**	**80.2**

APPENDIX 1 – *continued*

STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA AND COMMUNITY

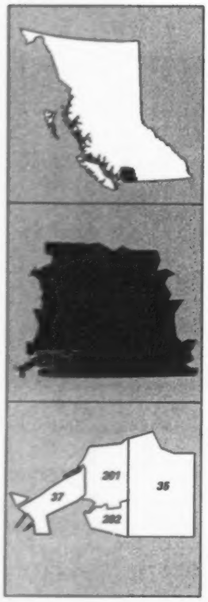
BRITISH COLUMBIA, 2009

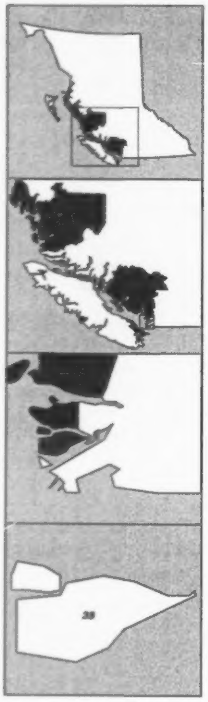
Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type†	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	Life Expectancy (2005-2009)
HSDA 22 FRASER NORTH									
LHA 040 New Westminster		M	32,100	389	236		2	39.3	77.6
		F	32,916	343	245		3	41.2	82.4
		T	65,016	732	481	283	6	40.3	80.1
New Westminster	C	M		389	236		2		
		F		343	245		3		
		T	65,016	732	481	283	6		
LHA 041 Burnaby		M	110,061	1,236	703		8	38.6	80.4
		F	112,741	1,131	641		11	40.5	84.9
		T	222,802	2,367	1,344	836	22	39.6	82.7
Burnaby	C	M		1,236	703		8		
		F		1,131	641		11		
		T	222,802	2,367	1,344	836	22		
LHA 042 Maple Ridge		M	46,569	526	295		5	37.0	78.0
		F	46,702	475	303		7	38.8	82.4
		T	93,271	1,001	598	403	15	37.9	80.2
Maple Ridge	DM	M		397	265		3		
		F		384	271		7		
		T	75,051	781	536	240	13		
Pitt Meadows	C	M		128	30		1		
		F		89	31		-		
		T	17,915	217	61	163	1		
LHA 043 Coquitlam		M	107,877	1,192	492		14	37.2	80.7
		F	107,681	1,077	513		7	38.9	84.1
		T	215,558	2,269	1,005	572	24	38.1	82.5
Anmore	VL	M		7	2		-		
		F		7	2		-		
		T	2,160	14	4	5	-		
Belcarra	VL	M		3	1		-		
		F		3	1		-		
		T	681	6	2	2	-		
Coquitlam	C	M		611	318		8		
		F		586	327		3		
		T	123,213	1,197	645	380	12		
Port Coquitlam	C	M		314	118		1		
		F		272	125		1		
		T	56,446	586	243	85	3		
Port Moody	C	M		253	53		4		
		F		203	58		3		
		T	32,998	456	111	99	8		
TOTAL		M	296,607	3,343	1,726		29	37.9	79.8
		F	300,040	3,026	1,702		28	39.7	84.0
		T	596,647	6,369	3,428	2,094	67	38.8	82.0

Appendix 1 – *continued*

STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA AND COMMUNITY

British Columbia, 2009





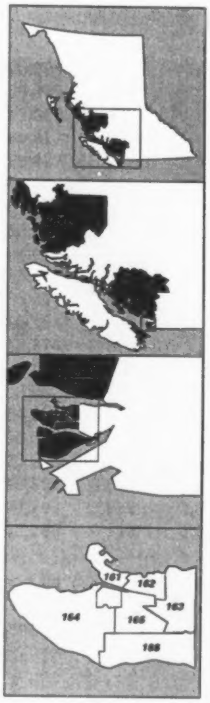
Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type†	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	Life Expectancy (2005-2009)
HSDA 23 FRASER SOUTH									
LHA 035 Langley		M	63,856	749	430		7	38.3	78.7
		F	65,534	724	460		4	40.3	82.9
		T	129,390	1,473	890	777	12	39.3	80.9
Langley	C	M		143	117		-		
		F		159	141		-		
		T	25,526	302	258	221	1		
Langley	DM	M		605	307		7		
		F		565	310		4		
		T	103,267	1,170	617	556	11		
LHA 037 Delta		M	50,055	436	312		1	39.7	80.5
		F	50,580	397	339		3	41.6	83.8
		T	100,635	833	651	231	6	40.6	82.2
Delta	DM	M		434	310		1		
		F		394	338		3		
		T	99,862	828	648	231	6		
LHA 201 Surrey		M	192,453	2,707	911		24	35.8	79.3
		F	189,254	2,478	875		21	37.3	83.2
		T	381,707	5,185	1,786	1,097	56	36.5	81.3
Surrey	C	M		2,706	911		24		
		F		2,478	875		21		
		T	446,561	5,184	1,786	1,096	56		
LHA 202 South Surrey/ White Rock		M	40,133	288	383		2	43.9	80.6
		F	44,118	242	464		2	47.4	85.1
		T	84,251	530	847	423	4	45.7	83.0
White Rock	C	M		66	114		-		
		F		49	177		-		
		T	19,102	115	291	79	-		
TOTAL		**M**	**346,497**	**4,180**	**2,036**		**34**	**37.8**	**79.5**
		F	**349,486**	**3,841**	**2,138**		**30**	**39.7**	**83.6**
		T	**695,983**	**8,021**	**4,174**	**2,528**	**78**	**38.8**	**81.6**
HA 02 FRASER TOTAL		**M**	**783,577**	**9,307**	**4,836**		**79**	**37.8**	**79.3**
		F	**789,046**	**8,552**	**4,857**		**83**	**39.7**	**83.5**
		T	**1,572,623**	**17,859**	**9,693**	**5,967**	**190**	**38.8**	**81.5**
HSDA 31 RICHMOND									
LHA 038 Richmond		M	94,369	952	427		8	39.0	82.9
		F	98,886	837	450		2	40.4	86.7
		T	193,255	1,789	877	1,010	11	39.7	84.9
Richmond	C	M		952	427		8		
		F		837	450		2		
		T	193,255	1,789	877	1,010	11		
TOTAL		**M**	**94,369**	**952**	**427**		**8**	**39.0**	**82.9**
		F	**98,886**	**837**	**450**		**2**	**40.4**	**86.7**
		T	**193,255**	**1,789**	**877**	**1,010**	**11**	**39.7**	**84.9**

APPENDIX 1 – *continued*

STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA AND COMMUNITY

BRITISH COLUMBIA, 2009

Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type†	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	Life Expectancy (2005-2009)
HSDA 32 VANCOUVER									
LHA 161 Vancouver - City Centre		M	60,991	555	377		6	39.3	78.4
		F	58,359	506	302		4	40.1	84.7
		T	119,350	1,061	679	1,274	12	39.7	81.5
LHA 162 Vancouver - Downtown Eastside		M	35,221	246	287		6	41.1	73.8
		F	29,427	310	183		1	40.8	84.5
		T	64,648	556	470	566	9	41.0	78.0
LHA 163 Vancouver - North East		M	51,750	545	299		5	38.7	81.4
		F	52,891	557	283		4	40.5	85.0
		T	104,641	1,102	582	350	11	39.6	83.2
LHA 164 Vancouver - Westside		M	63,615	555	333		3	38.0	82.1
		F	69,546	566	378		7	40.5	86.7
		T	133,161	1,121	711	1,128	11	39.3	84.5
LHA 165 Vancouver - Midtown		M	43,274	532	244		3	38.1	80.2
		F	44,928	520	210		-	39.5	84.8
		T	88,202	1,052	454	442	3	38.8	82.5
LHA 166 Vancouver - South		M	64,651	665	351		7	39.1	82.3
		F	68,555	636	486		1	41.5	84.8
		T	133,206	1,301	837	310	12	40.4	83.6
TOTAL		**M**	**319,502**	**3,098**	**1,891**		**30**	**39.0**	**80.0**
		F	**323,706**	**3,095**	**1,842**		**17**	**40.5**	**85.1**
		T	**643,208**	**6,193**	**3,733**	**4,071**	**59**	**39.7**	**82.6**
HSDA 33 NORTH SHORE/COAST GARIBALDI									
LHA 044 North Vancouver		M	67,338	627	364		6	39.3	81.0
		F	70,717	592	429		10	41.5	84.8
		T	138,055	1,219	793	448	20	40.5	83.0
North Vancouver	C	M	274	142			4		
		F		255	155		6		
		T	48,881	529	297	129	11		
North Vancouver	DM	M		345	214		1		
		F		326	272		4		
		T	86,725	671	486	315	8		
LHA 045 West Vancouver-Bowen Island		M	24,321	119	195		2	43.5	82.7
		F	27,075	135	272		3	46.0	85.9
		T	51,396	254	467	283	5	44.8	84.4
Bowen Island	IM	M		15	9		-		
		F		16	4		-		
		T	3,608	31	13	24	-		
Lions Bay	VL	M		2	3		-		
		F		5	1		-		
		T	1,398	7	4	7	-		
West Vancouver	DM	M		93	173		2		
		F		104	250		2		
		T	43,307	197	423	248	4		
LHA 046 Sunshine Coast		M	14,364	107	147		1	45.8	80.2
		F	15,187	106	125		2	46.7	83.5
		T	29,551	213	272	290	3	46.2	81.8
Gibsons	T	M		37	45		-		
		F		31	37		-		
		T	4,448	68	82	28	-		
Sechelt/ Sechelt Indian Govt. Dist.	DM/ IGD	M		46	54		-		
		F		42	60		1		
		T	10,013	88	114	48	1		



APPENDIX 1 – *continued*

STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA AND COMMUNITY

BRITISH COLUMBIA, 2009

Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type†	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	*Life* Expectancy (2005-2009)
LHA 047 Powell River		M	9,852	77	107		2	44.2	77.0
		F	9,976	69	104		1	45.7	83.2
		T	19,828	146	211	102	3	44.9	80.1
Powell River	C	M		59	82		-		
		F		38	84		1		
		T	13,338	97	166	58	1		
LHA 048 Howe Sound		M	18,408	250	76		2	35.4	79.5
		F	16,376	221	45		-	35.7	82.8
		T	34,784	471	121	406	3	35.6	81.0
Pemberton	VL	M		35	3		-		
		F		23	2		-		
		T	2,416	58	5	22	-		
Squamish	DM	M		146	47		2		
		F		130	36		-		
		T	17,181	276	83	79	3		
Whistler	DM	M		46	12		-		
		F		37	2		-		
		T	10,228	83	14	261	-		
LHA 049 Bella Coola Valley		M	1,488	16	9		-	38.3	75.7
		F	1,405	15	5		-	39.4	82.2
		T	2,893	31	14	4	-	38.8	78.6
LHA 083 Central Coast		M	765	11	6		1	34.1	X *
		F	702	12	6		1	33.9	X *
		T	1,467	23	12	9	4	34.0	70.5
TOTAL		**M**	**136,536**	**1,207**	**904**		**14**	**40.5**	**80.6**
		F	**141,438**	**1,150**	**986**		**17**	**42.5**	**84.4**
		T	**277,974**	**2,357**	**1,890**	**1,542**	**38**	**41.5**	**82.6**
HA 03 VANCOUVER COASTAL TOTAL		**M**	**550,407**	**5,257**	**3,222**		**52**	**39.4**	**80.6**
		F	**564,030**	**5,082**	**3,278**		**36**	**41.0**	**85.1**
		T	**1,114,437**	**10,339**	**6,500**	**6,623**	**108**	**40.2**	**82.9**

HSDA 41 SOUTH VANCOUVER ISLAND

Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type†	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	*Life* Expectancy (2005-2009)
LHA 061 Greater Victoria		M	105,955	975	997		9	40.8	79.0
		F	115,598	866	1,133		5	43.7	83.7
		T	221,553	1,841	2,130	1,178	15	42.3	81.5
Esquimalt	DM	M		92	59		2		
		F		86	62		2		
		T	17,682	178	121	107	4		
Oak Bay	DM	M		59	108		-		
		F		44	118		-		
		T	18,012	103	226	89	-		
Saanich	DM	M		408	294		3		
		F		357	258		2		
		T	113,516	765	552	213	5		
Victoria	C	M		360	485		3		
		F		313	659		1		
		T	82,785	673	1,144	741	5		
View Royal	T	M		40	38		1		
		F		59	22		-		
		T	9,583	99	60	23	1		

APPENDIX 1 – *continued*

STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA AND COMMUNITY

BRITISH COLUMBIA, 2009

Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type†	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	Life Expectancy (2005-2009)
LHA 062 Sooke		M	32,691	387	211		2	38.2	80.2
		F	32,374	383	171		3	38.7	82.3
		T	65,065	770	382	451	5	38.4	81.3
LHA 062 Sooke		M	33,535	402	194		5	38.1	80.0
		F	33,183	357	168		1	39.2	82.8
		T	66,718	759	362	390	6	38.6	81.5
Colwood	C	M		93	48		1		
		F		91	52				
		T	16,174	184	100	112	1		
Highlands	DM	M		7	3				
		F		8	1				
		T	2,175	15	4		3		
Langford	C	M		192	72		2		
		F		151	57		1		
		T	27,328	343	129	74	3		
Metchosin	DM	M		23	18				
		F		22	15				
		T	5,133	45	33	50			
Sooke	DM	M		72	45		2		
		F		77	37				
		T	10,540	149	82	116	2		
LHA 063 Saanich		M	30,656	198	331		2	45.7	81.0
		F	32,943	187	300		2	48.0	85.0
		T	63,599	385	631	332	4	46.9	83.1
Central Saanich	DM	M		57	68				
		F		56	92				
		T	16,170	113	160	94			
North Saanich	DM	M		23	37		1		
		F		25	31				
		T	11,021	48	68	53	1		
Sidney	T	M		37	86				
		F		31	80		1		
		T	11,578	68	166	57	1		
LHA 064 Gulf Islands		M	7,578	46	85		1	48.6	81.0
		F	8,130	36	62		1	49.9	X *
		T	15,708	82	147	183	2	49.2	83.8
TOTAL		**M**	**177,724**	**1,621**	**1,607**		**17**	**41.5**	**79.8**
		F	**189,854**	**1,446**	**1,663**		**9**	**43.9**	**84.0**
		T	**367,578**	**3,067**	**3,270**	**2,083**	**27**	**42.7**	**82.0**

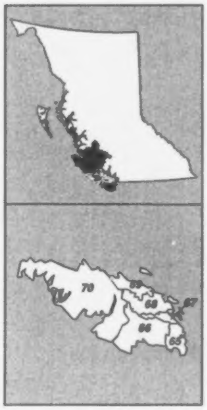
HSDA 42 CENTRAL VANCOUVER ISLAND

Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type†	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	Life Expectancy (2005-2009)
LHA 065 Cowichan		M	28,232	275	238		2	41.2	78.7
		F	28,668	268	201		-	42.5	82.6
		T	56,900	543	439	300	2	41.8	80.6
Duncan	C	M		23	63		1		
		F		27	87		-		
		T	5,008	50	150	32	1		
North Cowichan	DM	M		119	88		-		
		F		108	54		-		
		T	29,493	227	142	82	-		
LHA 066 Lake Cowichan		M	3,288	25	17		-	42.1	78.2
		F	3,135	17	22		-	42.1	X *
		T	6,423	42	39	29	-	42.1	80.6
Lake Cowichan	T	M		17	11		-		
		F		15	18		-		
		T	3,182	32	29	6	-		

APPENDIX 1 – *continued*

STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA AND COMMUNITY

BRITISH COLUMBIA, 2009



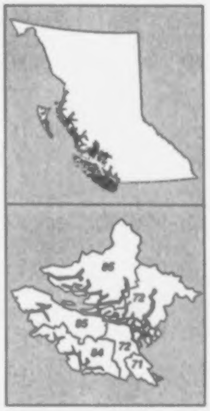
Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type[†]	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	Life Expectancy (2005-2009)
LHA 067 Ladysmith		M	8,945	71	117		2	45.7	76.1
		F	9,421	69	130		-	46.7	81.0
		T	18,366	140	247	89	2	46.2	78.5
Ladysmith	T	M		33	49		1		
		F		30	58		-		
		T	8,118	63	107	36	1		
LHA 068 Nanaimo		M	50,546	487	465		1	41.7	78.1
		F	52,343	436	410		3	43.6	82.8
		T	102,889	923	875	387	4	42.7	80.5
Lantzville	DM	M		16	21		-		
		F		13	14		-		
		T	3,701	29	35	22	-		
Nanaimo	C	M		422	391		1		
		F		378	364		3		
		T	84,228	800	755	292	4		
LHA 069 Qualicum		M	22,050	128	286		1	49.1	79.1
		F	23,306	109	244		1	50.8	83.9
		T	45,356	237	530	333	2	50.0	81.5
Parksville	C	M		44	97		-		
		F		33	111		-		
		T	11,783	77	208	117	-		
Qualicum Beach	T	M		10	118		-		
		F		14	71		-		
		T	8,766	24	189	62	-		
LHA 070 Alberni		M	16,007	192	160		-	41.4	75.2
		F	15,535	164	139		1	42.2	80.7
		T	31,542	356	299	526	1	41.8	77.8
Port Alberni	C	M		100	107		-		
		F		104	109		-		
		T	17,741	204	216	61	-		
Tofino	DM	M		18	5		-		
		F		18	3		-		
		T	1,829	36	8	349	-		
Ucluelet	DM	M		18	6		-		
		F		11	8		-		
		T	1,591	29	14	70	-		
TOTAL		**M**	**129,068**	**1,178**	**1,283**		**6**	**43.1**	**78.0**
		F	**132,408**	**1,063**	**1,146**		**5**	**44.6**	**82.6**
		T	**261,476**	**2,241**	**2,429**	**1,664**	**11**	**43.9**	**80.3**
HSDA 43 NORTH VANCOUVER ISLAND									
LHA 071 Courtenay		M	31,340	266	288		2	42.9	79.0
		F	32,744	228	244		2	44.4	83.6
		T	64,084	494	532	333	4	43.7	81.3
Comox	T	M		45	79		1		
		F		32	79		1		
		T	13,444	77	158	57	2		
Courtenay	C	M		112	96		-		
		F		114	90		-		
		T	24,216	226	186	109	-		
Cumberland	VL	M		30	16		-		
		F		15	21		-		
		T	3,163	45	37	8	-		

APPENDIX 1 – *continued*

STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA AND COMMUNITY

BRITISH COLUMBIA, 2009

Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type†	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	Life Expectancy (2005-2009)
LHA 072 Campbell River		**M**	**20,975**	**204**	**162**		**3**	**40.9**	**77.3**
		F	**20,605**	**209**	**156**		**1**	**41.8**	**81.9**
		T	**41,580**	**413**	**318**	**221**	**4**	**41.4**	**79.5**
Campbell River	C	M		168	134		1		
		F		175	135		1		
		T	31,328	343	269	152	2		
Sayward	VL	M		1	1		-		
		F		2	2		-		
		T	331	3	3	5	-		
LHA 084 Vancouver Island West		**M**	**1,265**	**9**	**10**		**-**	**42.0**	**87.3**
		F	**1,099**	**15**	**3**		**-**	**39.9**	**X ***
		T	**2,364**	**24**	**13**	**3**	**-**	**41.0**	**86.1**
Gold River	VL	M		8	9		-		
		F		11	2		-		
		T	1,425	19	11	3	-		
Tahsis	VL	M		1	1		-		
		F		1	1		-		
		T	381	2	2		-		
LHA 085 Vancouver Island North		**M**	**6,463**	**90**	**40**		**1**	**38.1**	**74.0**
		F	**5,824**	**69**	**33**		**-**	**37.9**	**77.3**
		T	**12,287**	**159**	**73**	**37**	**1**	**38.0**	**75.6**
Alert Bay	VL	M		8	2		-		
		F		7	10		-		
		T	478	15	12	6	-		
Port Alice	VL	M		5	6		-		
		F		4			-		
		T	842	9	6	4	-		
Port Hardy	DM	M		52	13		-		
		F		31	17		-		
		T	3,986	83	30	13	-		
Port McNeill	T	M		19	9		1		
		F		16	4		-		
		T	2,618	35	13	5	1		
Zeballos	VL	M		1	2		-		
		F		3			-		
		T	161	4	2		-		
TOTAL		**M**	**60,043**	**569**	**500**		**6**	**41.6**	**77.8**
		F	**60,272**	**521**	**436**		**3**	**42.8**	**82.5**
		T	**120,315**	**1,090**	**936**	**594**	**9**	**42.2**	**80.1**
HA 04 VANCOUVER ISLAND TOTAL		**M**	**366,835**	**3,368**	**3,390**		**29**	**42.1**	**78.8**
		F	**382,534**	**3,030**	**3,245**		**17**	**44.0**	**83.3**
		T	**749,369**	**6,398**	**6,635**	**4,341**	**47**	**43.1**	**81.1**

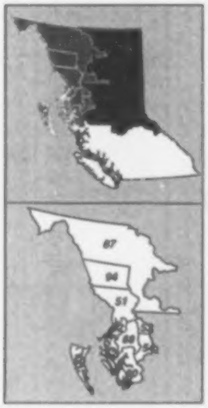


APPENDIX 1 – *continued*

STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA AND COMMUNITY

BRITISH COLUMBIA, 2009

HSDA 51 NORTHWEST



Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type*	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	Life Expectancy (2005-2009)
LHA 050 Queen Charlotte		M	2,431	12	22		1	39.2	73.0 *
		F	2,221	25	12		-	39.3	81.9 *
		T	4,652	37	34	21	1	39.2	76.9
Masset	VL	M		8	7		1		
		F		17	6		-		
		T	929	25	13	8	1		
Port Clements	VL	M		1	2		-		
		F		1			-		
		T	453	2	2	2	-		
LHA 051 Snow Country		M	247		4		-	41.1	75.8
		F	243	3			-	38.7	X *
		T	490	3	4	1	-	39.9	79.4
Stewart	DM	M			4		-		
		F		3			-		
		T	444	3	4	1	-		
LHA 052 Prince Rupert		M	7,145	89	49		1	37.9	75.9
		F	7,097	91	41		-	38.2	80.9
		T	14,242	180	90	39	1	38.0	78.2
Port Edward	DM	M		2			-		
		F		3	3		-		
		T	570	5	3	5	-		
Prince Rupert	C	M		86	47		1		
		F		82	38		-		
		T	12,846	168	85	33	1		
LHA 053 Upper Skeena		M	2,845	35	15		1	35.8	78.9
		F	2,563	43	8		-	35.8	X *
		T	5,408	78	23	15	1	35.8	80.2
Hazelton	VL	M		20	9		1		
		F		27	6		-		
		T	304	47	15	10	1		
New Hazelton	DM	M		9	3		-		
		F		8			-		
		T	604	17	3	4	-		
LHA 054 Smithers		M	8,186	109	50		-	37.1	77.5
		F	7,784	108	36		-	37.3	81.5
		T	15,970	217	86	82	3	37.2	79.3
Houston	DM	M		25	8		-		
		F		21	6		-		
		T	2,958	46	14	11	-		
Smithers	T	M		43	26		-		
		F		44	20		-		
		T	5,321	87	46	35	1		
Telkwa	VL	M		18	6		-		
		F		11	2		-		
		T	1,357	29	8	13	-		
LHA 080 Kitimat		M	5,401	59	45		-	39.2	X *
		F	4,896	58	25		-	39.7	82.1
		T	10,297	117	70	34	-	39.4	79.6
Kitimat	DM	M		51	37		-		
		F		52	21		-		
		T	9,226	103	58	31	-		

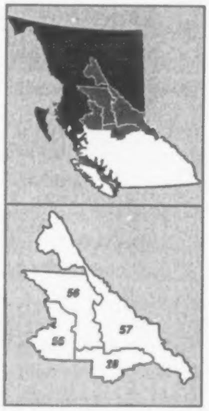
APPENDIX 1 – *continued*

STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA AND COMMUNITY

BRITISH COLUMBIA, 2009

Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type†	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	Life Expectancy (2005-2009)
LHA 087 Stikine		M	524	5	3		-	40.3	75.8
		F	487	5	2		-	40.3	X *
		T	1,011	10	5	5	-	40.3	79.4
LHA 088 Terrace		M	10,307	128	95		3	37.4	76.5
		F	9,970	131	52		2	38.0	79.8
		T	20,277	259	147	84	5	37.7	78.0
Terrace	C	M		68	53		2		
		F		79	30		2		
		T	11,675	147	83	48	4		
LHA 092 Nisga'a		M	1,033	24	7		-	35.6	X *
		F	935	16	3		-	34.5	X *
		T	1,968	40	10	6	-	35.1	73.8 *
LHA 094 Telegraph Creek		M	362	6	1		-	33.1	75.8
		F	330	3	2		-	32.9	X *
		T	692	9	3	3	-	33.0	79.4
TOTAL		**M**	**38,481**	**467**	**291**		**6**	**37.6**	**76.4**
		F	**36,526**	**483**	**181**		**2**	**38.0**	**80.9**
		T	**75,007**	**950**	**472**	**290**	**11**	**37.8**	**78.5**

HSDA 52 NORTHERN INTERIOR



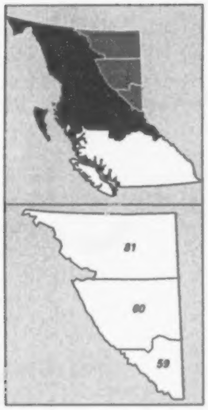
LHA 028 Quesnel		M	11,830	140	93		2	40.2	76.4
		F	11,754	118	76		1	40.6	81.8
		T	23,584	258	169	88	3	40.4	79.0
Quesnel	C	M		74	43		2		
		F		73	45		1		
		T	9,710	147	88	34	3		
Wells	DM	M		3	1		-		
		F		1			-		
		T	257	4	1	1	-		
LHA 055 Burns Lake		M	4,096	49	36		-	38.1	76.3
		F	3,784	50	24		-	38.3	79.8
		T	7,880	99	60	36	1	38.2	77.9
Burns Lake	VL	M		41	26		-		
		F		46	21		-		
		T	2,114	87	47	32	-		
Granisle	VL	M		4	6		-		
		F		2	3		-		
		T	396	6	9		-		
LHA 056 Nechako		M	7,773	125	65		1	37.2	74.8
		F	7,237	106	36		1	37.4	79.9
		T	15,010	231	101	61	2	37.3	77.1
Fort St. James	DM	M		41	17		-		
		F		30	11		1		
		T	1,322	71	28	15	1		
Fraser Lake	VL	M		10	11		1		
		F		11	4		-		
		T	1,122	21	15	11	1		
Vanderhoof	DM	M		58	30		-		
		F		60	20		-		
		T	4,143	118	50	28	-		
LHA 057 Prince George		M	48,990	580	319		8	37.5	76.5
		F	47,117	553	260		5	38.1	81.3
		T	96,107	1,133	579	435	13	37.8	78.8

APPENDIX 1 – *continued*

STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA AND COMMUNITY

BRITISH COLUMBIA, 2009

Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type†	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	Life Expectancy (2005-2009)
Mackenzie	DM	M		19	7		-		
		F		22	5		-		
		T	3,827	41	12	16	-		
McBride	VL	M		5	9		-		
		F		2	5		-		
		T	674	7	14	7	-		
Prince George	C	M		488	240		6		
		F		473	223		5		
		T	74,547	961	463	324	11		
Valemount	VL	M		4	6		1		
		F		4			-		
		T	1,044	8	6	23	1		
TOTAL		**M**	**72,689**	**894**	**513**		**11**	**37.9**	**76.3**
		F	**69,892**	**827**	**396**		**7**	**38.4**	**81.1**
		T	**142,581**	**1,721**	**909**	**620**	**19**	**38.2**	**78.6**
HSDA 53 NORTHEAST									
LHA 059 Peace River South		M	13,885	158	92		1	37.2	77.0
		F	13,091	178	84		2	38.3	80.5
		T	26,976	336	176	146	3	37.7	78.7
Chetwynd	DM	M		25	11		1		
		F		29	9		1		
		T	2,676	54	20	16	2		
Dawson Creek	C	M		90	48		-		
		F		90	45		1		
		T	11,514	180	93	72	1		
Pouce Coupe	VL	M		7	11		-		
		F		8	17		-		
		T	746	15	28	12	-		
Tumbler Ridge	DM	M		10	6		-		
		F		20	5		-		
		T	2,450	30	11	14	-		
LHA 060 Peace River North		M	18,109	332	83		1	33.3	76.8
		F	16,704	284	59		3	33.4	82.6
		T	34,813	616	142	160	4	33.4	79.5
Fort St. John	C	M		192	51		-		
		F		183	45		3		
		T	19,457	375	96	79	3		
Hudson's Hope	DM	M		7	5		-		
		F		1	2		-		
		T	1,051	8	7	3	-		
Taylor	DM	M		17	5		-		
		F		13	3		-		
		T	1,480	30	8	15	-		
LHA 081 Fort Nelson		M	3,290	54	16		-	32.7	75.4
		F	2,826	40	7		-	31.3	X *
		T	6,116	94	23	25	-	32.1	77.4
Fort Nelson	T	M		53	16		-		
		F		39	7		-		
		T	N/A	92	23	25	-		
TOTAL		**M**	**35,284**	**544**	**191**		**2**	**34.8**	**76.8**
		F	**32,621**	**502**	**150**		**5**	**35.2**	**81.6**
		T	**67,905**	**1,046**	**341**	**331**	**7**	**35.0**	**79.1**



APPENDIX 1 – *continued*

STATISTICAL SUMMARIES BY HEALTH AUTHORITY, HEALTH SERVICE DELIVERY AREA, LOCAL HEALTH AREA AND COMMUNITY

BRITISH COLUMBIA, 2009

	Health Authority/ Health Service Delivery Area/ Local Health Area/ Community (Incorporated Only)	Type†	Gender	Population	Live Births	Deaths	Marriages	Stillbirths	Average Age Population	Life Expectancy (2005-2009)
HA 05	**NORTHERN TOTAL**		**M**	**146,454**	**1,905**	**995**		**19**	**37.1**	**76.4**
			F	**139,039**	**1,812**	**727**		**14**	**37.5**	**81.2**
			T	**285,493**	**3,717**	**1,722**	**1,241**	**37**	**37.3**	**78.6**
HA 06	**PROVINCIAL HEALTH SERVICE AUTHORITY (PROVINCIAL TOTAL)**		**M**	**2,210,308**	**23,179**	**15,991**		**201**	**39.5**	**79.2**
			F	**2,244,899**	**21,729**	**15,236**		**169**	**41.3**	**83.6**
			T	**4,455,207**	**44,908**	**31,227**	**22,469**	**429**	**40.4**	**81.4**

Note: Live births, stillbirths and deaths are assigned to communities based on the postal code of usual residence.
Marriages are assigned according to the place where the marriage ceremony was performed, and include non-residents.
Totals for gender include cases with unknown gender.
Population estimates and average age (2009) and life expectancy (2005 -2009) from BC STATS, Ministry of Citizens' Services.
† C=City, T=Town, VL=Village, DM=District Municipality, IGD= Indian Government District, IM=Island Municipality, RM=Resort Municipality.
Some communities span the boundaries of more than one LHA. When this occurs, the community is shown under the LHA containing the larger portion of the population.
HSDA 32 Vancouver Total may include unspecified Vancouver addresses.
*This may be too small a population size to estimate Life Expectancy with any confidence.
**LHAs 51, 87, 94 have been combined to have a common life expectancy as they individually include regions too small for calculation.
"X" means that the value has been suppressed for reasons of data quality.

Appendix Two

Detailed Cause of Death by Gender and Age

British Columbia, 2009

Preamble to Appendix 2

Appendix 2 provides detailed causes of death by gender and age group for deaths that occurred in British Columbia to provincial residents in the current year. Causes of death are coded according to the World Health Organization's International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10). ICD-10 defines the underlying cause of death as "(a) the disease or injury which initiated the train of events leading directly to death, or (b) the circumstances of the accident or violence which produced the fatal injury." ICD-10 codes consist of a letter followed by a two-digit number, and sometimes include a third digit to provide more specificity. In this appendix, the ICD-10 codes are presented at the three character level only, truncating the third digit.

The list below provides a summary of ICD-10 codes, including many of the subgroups used for underlying causes of death in this report:

Cause of Death Category	**ICD-10 Code(s)**
Certain infectious and parasitic diseases	A00-B99
Tuberculosis	A15-A19, B90
HIV disease	B20-B24
Neoplasms	C00-D48
Malignant neoplasms	C00-C97
Malignant neoplasm of colon and rectum	C18-C21
Malignant neoplasm of lung	C34
Malignant neoplasm of female breast	C500-C509
Diseases of blood and blood-forming organs and disorders involving the immune mechanism	D50-D89
Endocrine, nutritional, and metabolic diseases	E00-E90
Diabetes mellitus	E10-E14
Mental and behavioural disorders	F00-F99
Vascular/senile dementia	F01, F03
Psychoactive substance and drug use/abuse	F11-F16, F19
Diseases of the nervous system	G00-G99
Alzheimer's disease	G30
Diseases of the eye and adnexa	H00-H59
Diseases of the ear and mastoid process	H60-H95
Diseases of the circulatory system	I00-I99
Cardiovascular disease	I00-I51
Ischemic heart diseases	I20-I25
Cerebrovascular diseases	I60-I69
Atherosclerosis	I70
Diseases of the respiratory system	J00-J99
Pneumonia/Influenza (excluding hypostatic)	J10-J181, J188, J189
Chronic Pulmonary Disease	J40-J44
Asthma	J45-J46
Diseases of the digestive system	K00-K93
Diseases of liver	K70-K76
Chronic liver disease/cirrhosis	K70, K73-74, K760-K761
Diseases of the skin and subcutaneous tissue	L00-L99
Diseases of the musculoskeletal system and connective tissue	M00-M99

Diseases of the genitourinary system	N00-N99
Complications of pregnancy, childbirth, and the puerperium	O00-O99
Certain conditions originating in the perinatal period	P00-P96
Congenital malformations and chromosome abnormalities	Q00-Q99
Symptoms, signs and abnormal findings, unknown causes	R00-R99
Sudden infant death syndrome (SIDS)	R95
Cause of death unknown or pending	R96-R99
External causes	V01-Y98
Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V899, Y850
Other transport accidents	V01, V05-V06, V10-V11, V15-V18, V198-V199, V800-V802, V806-V809, V812-V819, V822-V829, V891, V893, V91, V93-V99, Y859
Unintentional drowning (including water transport)	V90, V92, W65-W74
Unintentional falls	W00-W19
Exposure to smoke, fire and flames	X00-X09
Unintentional poisoning	X40-X49
Suicide	X60-X84, Y870
Homicide	X85-Y09, Y871

APPENDIX 2

DETAILED CAUSE OF DEATH BY GENDER AND AGE

BRITISH COLUMBIA, 2009

ICD-10	Cause of Death	Gender	Age of Deceased (in Years)										Total
			<1	1–4	5–9	10–14	15–19	20–24	25–44	45–64	65–79	80+	
A04	Other bacterial intestinal infections	M	-	-	-	-	-	-	-	1	7	22	30
		F	-	-	-	-	-	-	-	-	10	38	48
A04	Other bacterial intestinal infections	M	-	-	-	-	-	-	-	1	2	20	23
		F	-	-	-	-	-	-	-	-	3	34	43
A08	Viral and other specified intestinal infections	M	-	-	-	-	-	-	-	2	2	4	8
		F	-	-	-	-	-	-	-	-	-	9	9
A09	Diarrhoea and gastroenteritis of presumed infectious origin	M	1	-	-	-	-	-	-	-	3	11	15
		F	-	-	-	-	-	-	-	-	1	24	25
A16	Respiratory tuberculosis	M	-	-	-	-	-	-	1	-	2	2	5
		F	-	-	-	-	-	-	-	1	-	2	3
A40	Streptococcal septicemia	M	-	-	-	-	-	-	1	-	1	2	4
		F	-	1	-	-	-	-	-	-	1	1	3
A41	Other septicemia	M	-	-	1	-	-	-	3	11	29	51	95
		F	-	-	-	-	1	-	1	10	22	56	90
A49	Bacterial infection of unspecified site	M	-	-	-	-	-	-	-	1	3	1	5
		F	-	-	-	-	-	-	-	-	1	1	2
B18	Chronic viral hepatitis	M	-	-	-	-	-	-	3	61	9	6	79
		F	-	-	-	-	-	-	3	24	8	4	39
B20	HIV resulting in infectious and parasitic diseases	M	-	-	-	-	-	-	6	12	4	-	22
		F	-	-	-	-	-	-	4	4	-	-	8
B21	HIV resulting in malignant neoplasms	M	-	-	-	-	-	-	4	8	-	-	12
		F	-	-	-	-	-	-	-	-	-	-	-
B22	HIV resulting in other specified diseases	M	-	-	-	-	-	-	-	5	-	-	5
		F	-	-	-	-	-	-	-	1	-	-	1
B23	HIV disease resulting in other conditions	M	-	-	-	-	-	-	1	4	1	-	6
		F	-	-	-	-	-	-	-	-	-	-	-
B24	Unspecified HIV disease	M	-	-	-	-	-	-	-	5	2	1	8
		F	-	-	-	-	-	-	-	1	-	-	1
B90	Sequelae of tuberculosis	M	-	-	-	-	-	-	-	2	2	2	6
		F	-	-	-	-	-	-	-	-	-	2	2
B91	Post polio syndrome	M	-	-	-	-	-	-	-	1	-	1	2
		F	-	-	-	-	-	-	-	-	1	2	3
B94	Sequelae of other and unspecified infectious and parasitic diseases	M	-	-	-	-	-	-	-	-	-	3	3
		F	-	-	-	-	-	-	-	-	-	2	2
C02	Malignant neoplasm of other and unspecified parts of tongue	M	-	-	-	-	-	-	-	13	10	2	25
		F	-	-	-	-	-	-	1	3	5	5	14
C05	Malignant neoplasm of palate	M	-	-	-	-	-	-	-	1	2	1	4
		F	-	-	-	-	-	-	-	1	1	2	4
C06	Malignant neoplasm of other and unspecified parts of mouth	M	-	-	-	-	-	-	-	2	4	-	6
		F	-	-	-	-	-	-	-	1	2	7	10
C07	Malignant neoplasm of parotid gland	M	-	-	-	-	-	-	1	2	3	5	11
		F	-	-	-	-	-	-	-	2	-	-	2
C09	Malignant neoplasm of tonsil	M	-	-	-	-	-	-	-	6	1	1	8
		F	-	-	-	-	-	-	-	-	-	1	1
C10	Malignant neoplasm of oropharynx	M	-	-	-	-	-	-	2	7	3	1	13
		F	-	-	-	-	-	-	-	-	3	1	4
C11	Malignant neoplasm of nasopharynx	M	-	-	-	-	-	-	2	5	4	-	11
		F	-	-	-	-	-	1	-	1	-	1	3
C12	Malignant neoplasm of pyriform sinus	M	-	-	-	-	-	-	-	3	2	-	5
		F	-	-	-	-	-	-	-	-	-	-	-
C14	Malig. neoplasm of other & ill-defined in the lip, oral cavity and pharynx	M	-	-	-	-	-	-	-	9	9	7	25
		F	-	-	-	-	-	-	-	1	4	1	6
C15	Malignant neoplasm of esophagus	M	-	-	-	-	-	-	3	70	78	37	188
		F	-	-	-	-	-	-	-	16	25	25	66
C16	Malignant neoplasm of stomach	M	-	-	-	-	-	-	2	38	48	29	117
		F	-	-	-	-	-	-	4	16	29	31	80
C17	Malignant neoplasm of small intestine	M	-	-	-	-	-	-	-	4	6	2	12
		F	-	-	-	-	-	-	-	3	3	2	8
C18	Malignant neoplasm of colon	M	-	-	-	-	-	-	5	88	161	135	389
		F	-	-	-	-	-	-	11	67	104	159	341
C19	Malignant neoplasm of rectosigmoid junction	M	-	-	-	-	-	-	-	12	13	9	34
		F	-	-	-	-	-	-	2	8	9	15	34

Notes are included at end of Appendix 2.

APPENDIX 2 – *continued*

DETAILED CAUSE OF DEATH BY GENDER AND AGE

BRITISH COLUMBIA, 2009

ICD-10 Cause of Death	Gender	Age of Deceased (in Years) <1	1–4	5–9	10–14	15–19	20–24	25–44	45–64	65–79	80+	Total
C20 Malignant neoplasm of rectum	M	-	-	-	-	-	-	2	22	41	24	89
	F	-	-	-	-	-	-	-	14	20	35	69
C21 Malignant neoplasm of anus and anal canal	M	-	-	-	-	-	-	-	5	5	-	10
	F	-	-	-	-	-	-	-	7	1	4	12
C22 Malignant neoplasm of liver and intrahepatic bile ducts	M	-	-	-	-	-	-	4	68	75	46	193
	F	-	-	-	-	-	-	1	27	37	30	95
C23 Malignant neoplasm of gallbladder	M	-	-	-	-	-	-	-	5	5	4	14
	F	-	-	-	-	-	-	-	5	15	9	29
C24 Malignant neoplasm of other and unspecified parts of biliary tract	M	-	-	-	-	-	-	-	5	9	6	20
	F	-	-	-	-	-	-	-	3	4	7	14
C25 Malignant neoplasm of pancreas	M	-	-	-	-	-	-	3	84	147	80	314
	F	-	-	-	-	-	-	1	39	101	95	236
C26 Malignant neoplasm of other and ill-defined digestive organs	M	-	-	-	-	-	-	2	20	34	28	84
	F	-	-	-	-	-	-	-	11	21	31	63
C31 Malignant neoplasm of accessory sinuses	M	-	-	-	-	-	-	-	2	3	-	5
	F	-	-	-	-	-	-	-	1	1	-	2
C32 Malignant neoplasm of larynx	M	-	-	-	-	-	-	-	13	12	9	34
	F	-	-	-	-	-	-	-	2	2	2	6
C34 Malignant neoplasm of bronchus and lung	M	-	-	-	-	-	1	5	268	593	319	1,186
	F	-	-	-	-	-	1	12	274	492	304	1,083
C37 Malignant neoplasm of thymus	M	-	-	-	-	-	-	-	1	1	-	2
	F	-	-	-	-	-	-	-	1	1	1	3
C38 Malignant neoplasm of heart, mediastinum and pleura	M	-	-	-	-	-	-	-	1	2	1	4
	F	-	-	-	-	-	-	-	-	1	-	1
C41 Malig. neop. of bone & articular cartilage of other & unspecified sites	M	-	-	-	1	1	1	1	1	3	2	10
	F	-	-	-	-	1	1	1	3	2	3	11
C43 Malignant melanoma of skin	M	-	-	-	-	-	-	3	27	22	24	76
	F	-	-	-	-	-	2	4	20	18	16	60
C44 Other malignant neoplasms of skin	M	-	-	-	-	-	-	-	7	8	16	31
	F	-	-	-	-	-	-	-	3	1	8	12
C45 Mesothelioma	M	-	-	-	-	-	-	-	10	27	15	52
	F	-	-	-	-	-	-	-	1	4	6	11
C48 Malignant neoplasm of peritoneum & retro-peritoneum	M	-	-	-	-	-	-	-	1	2	-	3
	F	-	-	-	-	-	-	-	3	7	5	15
C49 Malignant neoplasm of other connective and soft tissue	M	-	-	-	-	1	-	1	10	8	14	34
	F	-	-	-	-	-	-	2	16	4	6	28
C50 Malignant neoplasm of breast	M	-	-	-	-	-	-	-	2	1	3	6
	F	-	-	-	-	-	-	31	199	189	177	596
C51 Malignant neoplasm of vulva	M	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	2	4	11	17
C52 Malignant neoplasm of vagina	M	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	1	2	2	5
C53 Malignant neoplasm of cervix uteri	M	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	6	14	5	8	33
C54 Malignant neoplasm of corpus uteri	M	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	2	14	26	14	56
C55 Malignant neoplasm of uterus, part unspecified	M	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	2	9	11	11	33
C56 Malignant neoplasm of ovary	M	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	8	77	84	63	232
C57 Malignant neoplasm of other and unspecified female genital organs	M	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	4	5	1	10
C61 Malignant neoplasm of prostate	M	-	-	-	-	-	-	1	47	186	328	562
	F	-	-	-	-	-	-	-	-	-	-	-
C64 Malignant neoplasm of kidney, except renal pelvis	M	-	-	-	-	-	-	4	29	58	38	129
	F	-	-	-	-	-	-	1	16	26	24	67
C66 Malignant neoplasm of ureter	M	-	-	-	-	-	-	-	1	2	2	5
	F	-	-	-	-	-	-	-	-	1	1	2
C67 Malignant neoplasm of bladder	M	-	-	-	-	-	-	1	21	88	97	207
	F	-	-	-	-	-	-	2	14	24	49	89
C68 Malignant neoplasm of other and unspecified urinary organs	M	-	-	-	-	-	-	-	1	1	3	5
	F	-	-	-	-	-	-	-	1	1	5	7

Notes are included at end of Appendix 2.

APPENDIX 2 – *continued*

DETAILED CAUSE OF DEATH BY GENDER AND AGE

BRITISH COLUMBIA, 2009

ICD-10 Cause of Death	Gender	Age of Deceased (in Years)										Total
		<1	1–4	5–9	10–14	15–19	20–24	25–44	45–64	65–79	80+	
C71 Malignant neoplasm of brain	M	-	1	4	-	1	-	16	60	46	14	142
	F	1	2	1	-	-	2	5	32	31	14	88
C73 Malignant neoplasm of thyroid gland	M	-	-	-	-	-	-	-	5	7	5	17
	F	-	-	-	-	-	-	-	3	4	5	12
C74 Malignant neoplasm of adrenal gland	M	-	-	-	-	1	-	-	4	-	-	5
	F	-	1	-	-	-	-	-	2	3	-	6
C76 Malignant neoplasm of other and ill-defined sites	M	-	-	-	-	-	-	-	5	10	7	22
	F	-	-	-	-	-	-	-	5	8	18	31
C80 Malignant neoplasm - primary site unknown	M	-	-	-	-	-	-	1	41	53	55	150
	F	-	-	-	-	1	-	3	22	45	104	175
C81 Hodgkin's disease	M	-	-	-	-	1	-	-	2	3	1	7
	F	-	-	-	-	-	-	1	1	-	2	4
C82 Follicular [nodular] non-Hodgkin's lymphoma	M	-	-	-	-	-	-	-	1	4	-	5
	F	-	-	-	-	-	-	-	2	3	1	6
C83 Diffuse non-Hodgkin's lymphoma	M	-	-	-	-	-	-	1	7	10	5	23
	F	-	-	-	-	-	-	-	4	7	7	18
C84 Peripheral and cutaneous T-cell lymphomas	M	-	-	-	-	-	-	1	3	3	3	10
	F	-	-	-	-	-	-	1	4	5	2	12
C85 Other and unspecified types of non-Hodgkin's lymphoma	M	-	-	-	-	-	-	6	34	78	62	180
	F	-	-	-	-	-	-	-	23	40	65	128
C90 Multiple myeloma and malignant plasma cell neoplasms	M	-	-	-	-	-	-	2	17	39	27	85
	F	-	-	-	-	-	-	-	18	20	25	63
C91 Lymphoid leukemia	M	-	-	-	-	1	-	1	13	21	21	57
	F	-	-	-	-	-	-	1	5	8	26	40
C92 Myeloid leukemia	M	-	-	-	-	1	-	4	17	33	16	71
	F	-	-	-	-	1	1	3	15	24	17	61
C95 Leukemia of unspecified cell type	M	-	-	-	-	-	-	-	8	11	12	31
	F	-	-	-	-	-	-	-	5	4	9	18
C96 Other and unspec. malig. neopl. of lymphoid, hematopoietic & rel. tissue	M	-	-	-	-	-	-	-	1	1	2	4
	F	-	-	-	-	-	-	-	-	-	1	1
D32 Benign neoplasm of meninges	M	-	-	-	-	-	-	-	-	4	1	5
	F	-	-	-	-	-	-	1	2	4	8	15
D37 Neoplasm of uncer./unk. behaviour of oral cavity and digestive organs	M	-	-	-	-	-	-	-	-	2	1	3
	F	-	-	-	-	-	-	-	-	3	3	6
D43 Neoplasm of uncer./unk. behaviour of brain & central nervous system	M	-	-	-	-	-	-	-	2	2	4	8
	F	-	-	-	-	-	-	-	3	3	4	10
D45 Polycythemia vera	M	-	-	-	-	-	-	-	-	3	3	6
	F	-	-	-	-	-	-	-	-	1	1	2
D46 Myelodysplastic syndromes	M	-	-	-	-	-	-	1	2	17	25	45
	F	-	-	-	-	1	-	-	1	11	28	41
D47 Neoplasm of uncer./unk. behaviour of lymphoid, hematopoietic & rel. tissue	M	-	-	-	-	-	-	-	1	11	7	19
	F	-	-	-	-	-	-	-	1	2	9	12
D48 Neoplasm of uncer./unk. behaviour of other and unspecified sites	M	-	-	-	-	-	-	-	-	1	1	2
	F	-	-	-	-	-	-	-	-	1	2	3
D61 Other aplastic anemias	M	-	-	-	-	-	-	1	-	1	3	5
	F	-	-	-	-	-	-	-	1	2	1	4
D64 Other anemias	M	-	-	-	-	-	-	-	2	1	15	18
	F	-	-	-	-	-	-	-	-	5	14	19
D68 Other coagulation defects	M	-	-	-	-	-	-	-	2	-	1	3
	F	-	-	-	-	-	-	-	1	1	2	4
D69 Purpura and other hemorrhagic conditions	M	-	-	-	-	-	-	-	-	-	3	3
	F	-	-	-	1	-	-	-	1	3	2	7
D70 Agranulocytosis	M	-	-	-	-	-	-	1	1	2	5	9
	F	-	-	-	-	-	-	1	-	2	-	3
D86 Sarcoidosis	M	-	-	-	-	-	-	2	2	-	-	4
	F	-	-	-	-	-	-	-	3	-	1	4
E03 Other hypothyroidism	M	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-	1	7	8
E10 Insulin-dependent diabetes mellitus	M	-	-	-	-	-	-	2	8	13	10	33
	F	-	-	-	-	-	-	2	4	6	11	23
E11 Non-insulin-dependent diabetes mellitus	M	-	-	-	-	-	-	3	18	55	57	133
	F	-	-	-	-	-	-	-	6	31	81	118

Notes are included at end of Appendix 2.

APPENDIX 2 – *continued*

DETAILED CAUSE OF DEATH BY GENDER AND AGE

BRITISH COLUMBIA, 2009

ICD-10	Cause of Death	Gender	Age of Deceased (in Years) <1	1–4	5–9	10–14	15–19	20–24	25–44	45–64	65–79	80+	Total
E14	**Diabetes mellitus NOS**	M	-	-	-	-	-	-	1	72	134	148	355
		F	-	-	-	-	-	-	2	31	70	197	300
E46	Unspecified protein-energy malnutrition	M	-	-	-	-	-	-	-	-	1	2	3
		F	-	-	-	-	-	-	-	-	-	8	8
E66	**Obesity**	M	-	-	-	-	-	-	5	11	8	-	24
		F	-	-	-	-	-	-	1	11	-	3	15
E78	Disorders of lipoprotein metabolism and other lipidemias	M	-	-	-	-	-	-	-	8	8	11	27
		F	-	-	-	-	-	-	1	3	4	16	24
E83	**Disorders of mineral metabolism**	M	-	-	-	-	-	-	-	1	1	-	2
		F	-	-	-	-	-	-	1	1	1	1	4
E84	Cystic fibrosis	M	-	-	-	-	-	-	3	-	-	-	3
		F	-	-	-	-	-	2	4	1	-	-	7
E85	**Amyloidosis**	M	-	-	-	-	-	-	-	3	1	2	6
		F	-	-	-	-	-	-	1	2	4	5	12
E86	Volume depletion	M	-	-	-	-	-	-	-	-	1	15	16
		F	-	-	-	-	-	-	-	-	2	18	20
E87	**Other disorders of fluid, electrolyte and acid-base balance**	M	-	-	-	-	-	-	-	1	3	6	10
		F	-	-	-	-	-	1	1	1	2	10	15
E88	Other metabolic disorders	M	1	2	1	1	1	-	-	-	3	4	13
		F	-	-	-	-	-	-	-	3	2	4	9
F03	**Unspecified dementia**	M	-	-	-	-	-	-	-	5	54	298	357
		F	-	-	-	-	-	-	-	8	63	596	667
F05	Delirium, not induced by alcohol and other psychoactive substances	M	-	-	-	-	-	-	-	-	3	17	20
		F	-	-	-	-	-	-	-	-	3	13	16
F10	**Mental and behavioural disorders due to use of alcohol**	M	-	-	-	-	-	-	3	44	19	4	70
		F	-	-	-	-	-	-	2	10	3	3	18
F19	Multiple drug misuse and misuse of other psychoactive substances	M	-	-	-	-	-	-	-	7	-	-	7
		F	-	-	-	-	-	-	2	-	-	-	2
F50	**Eating disorders**	M	-	-	-	-	-	-	-	-	1	1	2
		F	-	-	-	-	-	-	2	2	-	5	9
G10	Huntington's disease	M	-	-	-	-	-	-	-	3	2	2	7
		F	-	-	-	-	-	-	1	4	2	1	8
G12	**Spinal muscular atrophy and related syndromes**	M	1	-	-	-	-	-	3	17	31	11	63
		F	-	-	-	-	-	-	4	17	21	11	53
G20	Parkinson's disease	M	-	-	-	-	-	-	-	3	56	112	171
		F	-	-	-	-	-	-	-	4	22	65	91
G30	**Alzheimer's disease**	M	-	-	-	-	-	-	-	4	51	154	209
		F	-	-	-	-	-	-	-	4	61	402	467
G31	Other degenerative diseases of nervous system, NEC	M	-	-	-	-	-	-	-	4	16	16	36
		F	-	-	-	-	-	-	-	6	8	3	17
G35	**Multiple sclerosis**	M	-	-	-	-	-	-	2	8	6	5	21
		F	-	-	-	-	-	-	1	22	12	10	45
G40	Epilepsy	M	-	-	-	-	-	1	5	5	-	2	13
		F	-	-	-	-	-	2	3	1	-	1	7
G45	**Transient cerebral ischemic attacks and related syndromes**	M	-	-	-	-	-	-	-	-	1	2	3
		F	-	-	-	-	-	-	-	-	-	3	3
G47	Sleep disorders	M	-	-	-	-	1	-	2	1	-	-	4
		F	-	-	-	-	-	-	-	1	1	-	2
G70	**Other myoneural disorders**	M	-	-	-	-	-	-	-	1	1	4	6
		F	-	-	-	-	-	-	-	-	1	1	2
G71	Primary disorders of muscles	M	-	-	-	-	-	-	3	4	-	-	7
		F	-	-	-	-	-	-	1	2	2	2	7
G80	**Infantile cerebral palsy**	M	-	-	1	-	-	-	1	2	-	1	5
		F	-	1	-	-	-	1	1	2	-	1	6
G91	Hydrocephalus (acquired)	M	-	-	-	-	-	-	2	1	-	1	4
		F	-	-	-	-	-	-	-	-	1	1	2
G93	**Other disorders of brain**	M	-	-	-	-	-	-	3	11	3	-	17
		F	-	-	-	-	-	-	1	3	3	2	9
I05	Rheumatic mitral valve diseases	M	-	-	-	-	-	-	-	1	2	2	5
		F	-	-	-	-	-	-	-	1	4	8	13
I07	**Rheumatic tricuspid valve diseases**	M	-	-	-	-	-	-	-	-	-	2	2
		F	-	-	-	-	-	-	1	-	1	1	3

Notes are included at end of Appendix 2.

APPENDIX 2 – *continued*

DETAILED CAUSE OF DEATH BY GENDER AND AGE

BRITISH COLUMBIA, 2009

ICD-10	Cause of Death	Gender	Age of Deceased (in Years)										Total
			<1	1–4	5–9	10–14	15–19	20–24	25–44	45–64	65–79	80+	
I08	**Multiple valve diseases**	M	-	-	-	-	-	-	-	2	3	9	14
		F	-	-	-	-	-	-	-	1	4	11	16
I09	Other rheumatic heart diseases	M	-	-	-	-	-	-	-	-	1	1	2
		F	-	-	-	-	-	-	-	-	1	2	3
I10	**Essential (primary) hypertension**	M	-	-	-	-	-	-	1	5	12	23	41
		F	-	-	-	-	-	-	-	3	14	42	59
I11	Hypertensive heart disease	M	-	-	-	-	-	-	-	9	13	18	40
		F	-	-	-	-	-	-	-	3	5	63	71
I12	**Hypertensive renal disease**	M	-	-	-	-	-	-	1	6	14	33	54
		F	-	-	-	-	-	-	-	3	11	54	68
I13	Hypertensive heart and renal disease	M	-	-	-	-	-	-	-	1	2	4	7
		F	-	-	-	-	-	-	-	-	-	11	11
I20	**Angina pectoris**	M	-	-	-	-	-	-	-	1	-	1	2
		F	-	-	-	-	-	-	-	-	-	5	5
I21	Acute MI	M	-	-	-	-	-	-	12	184	377	543	1,116
		F	-	-	-	-	-	-	2	38	173	686	899
I24	**Other acute ischemic heart diseases**	M	-	-	-	-	-	-	1	5	9	35	50
		F	-	-	-	-	-	-	-	3	7	39	49
I25	Chronic ischemic heart disease	M	-	-	-	-	-	-	14	230	377	638	1,259
		F	-	-	-	-	-	-	4	50	161	766	981
I26	**Pulmonary embolism**	M	-	-	-	-	2	-	2	8	7	12	31
		F	-	-	-	-	-	-	6	10	10	12	38
I27	Other pulmonary heart diseases	M	-	-	-	-	-	-	1	2	8	4	15
		F	-	-	-	-	-	-	-	3	3	5	11
I31	**Other diseases of pericardium**	M	-	-	-	-	-	-	1	1	5	-	7
		F	-	-	-	-	-	-	-	1	-	1	2
I33	Acute and subacute endocarditis	M	-	-	-	-	-	-	4	5	-	4	13
		F	-	-	-	-	-	-	2	1	-	-	3
I34	**Nonrheumatic mitral valve disorders**	M	-	-	-	-	-	-	1	-	2	5	8
		F	-	-	-	-	-	-	-	-	8	8	16
I35	Nonrheumatic aortic valve disorders	M	-	-	-	-	-	-	-	4	19	54	77
		F	-	-	-	-	-	-	-	1	8	90	99
I38	**Endocarditis**	M	-	-	-	-	-	-	1	4	6	16	27
		F	-	-	-	-	-	-	-	4	3	23	30
I42	Cardiomyopathy	M	-	-	1	-	-	1	7	31	32	30	102
		F	-	-	-	1	-	-	1	9	16	38	65
I44	**Atrioventricular and left bundle-branch block**	M	-	-	-	-	-	-	-	-	-	4	4
		F	-	-	-	-	-	-	-	1	-	2	3
I45	Other conduction disorders	M	-	-	-	-	-	-	-	1	1	4	6
		F	-	-	-	-	-	-	1	1	1	4	7
I46	**Cardiac arrest**	M	-	-	-	-	-	-	2	7	10	8	27
		F	-	-	-	-	-	-	-	-	4	20	24
I47	Paroxysmal tachycardia	M	-	-	-	-	-	-	-	1	1	3	5
		F	-	-	-	-	-	-	-	-	-	-	-
I48	**Atrial fibrillation and flutter**	M	-	-	-	-	-	-	-	5	22	82	109
		F	-	-	-	-	-	-	-	3	26	188	217
I49	Other cardiac arrhythmias	M	-	-	-	-	-	-	2	11	13	15	41
		F	-	-	-	-	-	-	4	5	9	36	54
I50	**Heart failure**	M	-	-	-	-	-	-	-	6	38	221	265
		F	-	-	-	-	-	-	-	6	29	391	426
I51	Complications and ill-defined descriptions of heart disease	M	-	-	-	-	2	-	5	14	8	12	41
		F	-	1	-	-	-	-	-	1	10	29	41
I60	**Subarachnoid hemorrhage**	M	-	-	-	-	-	-	3	15	10	6	34
		F	-	-	-	-	-	-	5	19	23	14	61
I61	Intracerebral hemorrhage	M	-	-	-	-	-	-	5	21	36	47	109
		F	-	-	-	-	-	-	-	9	34	56	99
I62	**Other nontraumatic intracranial hemorrhage**	M	-	-	-	-	-	-	2	5	19	31	57
		F	-	-	-	-	-	-	-	6	18	31	55
I63	Cerebral infarction	M	-	-	-	-	-	-	1	6	10	23	40
		F	-	-	-	-	-	-	-	8	13	42	63
I64	**CVA, NOS**	M	-	-	-	-	-	-	2	33	150	377	562
		F	-	-	-	-	-	-	-	13	100	720	833

Notes are included at end of Appendix 2.

APPENDIX 2 – *continued*

DETAILED CAUSE OF DEATH BY GENDER AND AGE

BRITISH COLUMBIA, 2009

ICD-10	Cause of Death	Gender	Age of Deceased (in Years)										Total
			<1	1–4	5–9	10–14	15–19	20–24	25–44	45–64	65–79	80+	
I67	**Other cerebrovascular diseases**	**M**	-	-	-	-	-	-	1	4	20	77	102
		F	-	-	-	-	-	-	1	5	10	134	150
I69	Sequelae of cerebrovascular disease	M	-	-	-	-	-	-	-	2	17	38	57
		F	-	-	-	-	-	-	-	-	9	68	77
I70	**Atherosclerosis**	**M**	-	-	-	-	-	-	-	2	11	13	26
		F	-	-	-	-	-	-	-	1	3	38	42
I71	Aortic aneurysm and dissection	M	-	-	-	-	-	1	4	19	49	48	121
		F	-	-	-	-	-	-	-	6	21	37	64
I72	**Other aneurysm**	**M**	-	-	-	-	-	-	-	1	3	4	8
		F	-	-	-	-	-	-	-	-	1	-	1
I73	Other peripheral vascular diseases	M	-	-	-	-	-	-	-	1	15	23	39
		F	-	-	-	-	-	-	-	1	6	35	42
I74	**Arterial embolism and thrombosis**	**M**	-	-	-	-	-	-	-	2	-	2	4
		F	-	-	-	-	-	-	-	1	-	3	4
I77	Other disorders of arteries and arterioles	M	-	-	-	-	-	-	-	-	3	1	4
		F	-	-	-	-	-	-	-	1	2	5	8
I80	**Phlebitis and thrombophlebitis**	**M**	-	-	-	-	-	-	1	6	2	5	14
		F	-	-	-	-	-	-	2	2	2	8	14
I99	Other and unspecified disorders of circulatory system	M	-	-	-	-	-	-	-	-	1	1	2
		F	-	-	-	-	-	-	-	-	1	2	3
J06	**Acute upper respiratory infections of multiple and unspecified sites**	**M**	-	-	-	-	-	-	-	-	-	1	1
		F	-	-	-	-	-	-	-	-	-	4	4
J10	Influenza due to identified influenza virus	M	-	-	2	-	-	-	1	9	2	3	17
		F	-	1	-	-	-	-	2	10	4	3	20
J11	**Influenza, virus not identified**	**M**	1	-	-	-	-	-	1	2	2	4	10
		F	-	-	-	-	-	-	-	5	2	15	22
J12	Viral pneumonia, NEC	M	1	-	-	-	-	-	-	3	1	1	6
		F	-	-	-	-	-	-	-	1	-	1	2
J15	**Bacterial pneumonia, NEC**	**M**	-	-	-	-	-	-	1	6	4	2	13
		F	-	1	-	-	-	-	3	3	1	2	10
J18	Pneumonia, organism unspecified	M	-	-	-	-	-	2	8	36	108	389	543
		F	-	-	-	-	-	-	5	48	78	526	657
J22	**Unspecified acute lower respiratory infection**	**M**	-	-	-	-	-	-	-	-	-	1	1
		F	-	-	-	-	-	-	-	-	2	2	4
J40	Bronchitis, not specified as acute or chronic	M	-	-	-	-	-	-	-	-	-	3	3
		F	-	-	-	-	-	-	-	1	-	2	3
J43	**Emphysema**	**M**	-	-	-	-	-	-	-	9	26	17	52
		F	1	-	-	-	-	-	-	4	16	24	45
J44	Other chronic obstructive pulmonary disease	M	-	-	-	-	-	-	-	49	231	377	657
		F	-	-	-	-	-	-	3	38	202	406	649
J45	**Asthma**	**M**	-	-	-	-	-	-	1	5	4	6	16
		F	-	-	-	-	-	-	1	3	6	20	30
J47	Bronchiectasis	M	-	-	-	-	-	-	-	1	4	4	9
		F	-	-	-	-	-	-	-	1	4	17	22
J61	**Pneumoconiosis due to asbestos and other mineral fibres**	**M**	-	-	-	-	-	-	-	-	7	6	13
		F	-	-	-	-	-	-	-	-	-	-	-
J69	Aspiration pneumonia due to solids and liquids	M	-	-	1	-	1	-	3	13	28	88	134
		F	-	-	-	-	-	-	-	8	17	99	124
J80	**Adult respiratory distress syndrome**	**M**	-	-	-	-	1	-	-	-	-	-	1
		F	-	-	-	-	-	-	-	2	1	1	4
J84	Other interstitial pulmonary diseases	M	-	-	-	-	-	-	1	18	59	66	144
		F	-	-	-	-	-	-	1	14	27	29	71
J86	**Pyothorax**	**M**	-	-	-	-	-	-	-	3	4	2	9
		F	-	-	-	-	-	-	-	-	-	2	2
J90	Pleural effusion, NEC	M	-	-	-	-	-	-	-	1	1	8	10
		F	-	-	-	-	-	-	-	-	-	-	-
J96	**Respiratory failure, NEC**	**M**	-	-	-	-	-	-	-	-	2	2	4
		F	-	-	-	-	-	-	-	1	-	4	5
J98	Other respiratory disorders	M	-	-	-	-	-	-	-	1	4	9	14
		F	-	-	-	-	-	-	-	1	2	18	21
K21	**Gastro-esophageal reflux disease**	**M**	-	-	-	-	-	-	-	1	1	10	12
		F	-	-	-	-	-	-	-	1	-	6	7

Notes are included at end of Appendix 2.

APPENDIX 2 – *continued*
DETAILED CAUSE OF DEATH BY GENDER AND AGE
BRITISH COLUMBIA, 2009

ICD-10 Cause of Death	Gender	Age of Deceased (in Years)										Total
		<1	1–4	5–9	10–14	15–19	20–24	25–44	45–64	65–79	80+	
K22 Other diseases of esophagus	M	-	-	-	-	-	-	-	6	1	11	18
	F	-	-	-	-	-	-	-	-	-	7	7
K25 Gastric ulcer	M	-	-	-	-	-	-	-	2	1	2	5
	F	-	-	-	-	-	-	-	3	1	5	9
K26 Duodenal ulcer	M	-	-	-	-	-	-	-	5	2	10	17
	F	-	-	-	-	-	-	-	4	2	7	13
K27 Peptic ulcer	M	-	-	-	-	-	-	-	2	-	-	2
	F	-	-	-	-	-	-	-	-	2	7	9
K29 Gastritis and duodenitis	M	-	-	-	-	-	-	-	1	1	3	5
	F	-	-	-	-	-	-	-	2	4	1	7
K31 Other diseases of stomach and duodenum	M	-	-	-	-	-	-	-	1	1	-	2
	F	-	-	-	-	-	-	-	-	2	3	5
K40 Inguinal hernia	M	-	-	-	-	-	-	-	1	-	6	7
	F	-	-	-	-	-	-	-	-	-	-	-
K43 Ventral hernia	M	-	-	-	-	-	-	1	-	1	2	4
	F	-	-	-	-	-	-	-	-	-	1	1
K44 Diaphragmatic hernia	M	-	-	-	-	-	-	-	-	-	2	2
	F	-	-	-	-	-	-	-	-	1	6	7
K46 Unspecified abdominal hernia	M	-	-	-	-	-	-	-	1	2	5	8
	F	-	-	-	-	-	-	-	-	3	2	5
K50 Crohn's disease	M	-	-	-	-	-	-	1	1	-	2	4
	F	-	-	-	-	-	-	-	1	6	1	8
K52 Other noninfective gastroenteritis and colitis	M	-	-	-	-	-	-	-	-	2	3	5
	F	-	-	-	-	-	-	-	1	2	7	10
K55 Vascular disorders of intestine	M	-	-	-	-	-	-	1	5	18	27	51
	F	-	-	-	-	-	-	-	7	29	49	85
K56 Paralytic ileus and intestinal obstruction without hernia	M	-	-	-	-	-	-	-	4	10	34	48
	F	-	-	-	-	-	-	1	5	14	63	83
K57 Diverticular disease of intestine	M	-	-	-	-	-	-	-	2	3	13	18
	F	-	-	-	-	-	-	-	-	6	24	30
K59 Other functional intestinal disorders	M	-	-	-	-	-	1	-	-	-	3	4
	F	-	-	-	-	-	-	-	1	-	4	5
K63 Other diseases of intestine	M	-	-	-	-	-	-	-	-	4	7	11
	F	-	-	-	-	-	-	-	2	5	12	19
K65 Peritonitis	M	-	-	-	-	-	-	-	3	3	1	7
	F	-	-	-	-	-	-	-	1	3	2	6
K66 Other disorders of peritoneum	M	-	-	-	-	-	-	-	2	2	1	5
	F	-	-	-	-	-	-	-	1	-	1	2
K70 Alcoholic liver disease	M	-	-	-	-	-	-	8	99	55	9	171
	F	-	-	-	-	-	-	6	51	16	7	80
K72 Hepatic failure	M	-	-	-	-	-	-	1	8	6	1	16
	F	-	-	-	-	-	-	-	4	3	7	14
K74 Fibrosis and cirrhosis of liver	M	-	-	-	-	-	-	2	17	13	10	42
	F	-	-	-	-	-	-	-	13	10	15	38
K75 Other inflammatory liver diseases	M	-	-	-	-	-	-	-	1	3	-	4
	F	-	-	-	-	-	-	-	2	5	4	11
K76 Other diseases of liver	M	-	-	-	-	-	-	-	2	6	-	8
	F	-	-	-	-	-	-	4	3	6	1	14
K80 Cholelithiasis	M	-	-	-	-	-	-	-	1	3	-	4
	F	-	-	-	-	-	-	-	-	3	10	13
K81 Cholecystitis	M	-	-	-	-	-	-	-	1	3	6	10
	F	-	-	-	-	-	-	-	3	4	14	21
K82 Other diseases of gallbladder	M	-	-	-	-	-	-	-	3	-	2	5
	F	-	-	-	-	-	-	-	2	2	-	4
K83 Other diseases of biliary tract	M	-	-	-	-	-	-	-	1	4	5	10
	F	-	-	-	-	-	-	-	1	5	7	13
K85 Acute pancreatitis	M	-	-	-	-	-	-	2	7	12	3	24
	F	-	-	-	-	-	-	1	2	6	9	18
K86 Other diseases of pancreas	M	-	-	-	-	-	-	1	1	3	1	6
	F	-	-	-	-	-	-	-	2	-	-	2
K92 Other diseases of digestive system	M	-	-	-	-	-	-	5	15	24	52	96
	F	-	-	-	-	-	-	-	9	20	68	97

Notes are included at end of Appendix 2.

APPENDIX 2 – *continued*

DETAILED CAUSE OF DEATH BY GENDER AND AGE

BRITISH COLUMBIA, 2009

ICD-10 Cause of Death	Gender	Age of Deceased (in Years)										Total
		<1	1–4	5–9	10–14	15–19	20–24	25–44	45–64	65–79	80+	
L03 Cellulitis	M	-	-	-	-	-	-	-	1	4	5	10
	F	-	-	-	-	-	-	-	2	1	11	14
L08 Other local infections of skin and subcutaneous tissue	M	-	-	-	-	-	-	-	-	1	1	2
	F	-	-	-	-	-	-	-	-	1	2	3
L89 Decubitus ulcer	M	-	-	-	-	-	-	-	-	1	4	5
	F	-	-	-	-	-	-	-	1	3	9	13
L97 Ulcer of lower limb, NEC	M	-	-	-	-	-	-	-	-	-	1	1
	F	-	-	-	-	-	-	-	-	2	2	4
L98 Other disorders of skin and subcutaneous tissue, NEC	M	-	-	-	-	-	-	1	-	1	1	3
	F	-	-	-	-	-	-	-	-	1	2	3
M00 Pyogenic arthritis	M	-	-	-	-	-	-	-	1	1	2	4
	F	-	-	-	-	-	-	-	2	-	4	6
M05 Seropositive rheumatoid arthritis	M	-	-	-	-	-	-	-	1	1	-	2
	F	-	-	-	-	-	-	-	1	2	1	4
M06 Other rheumatoid arthritis	M	-	-	-	-	-	-	-	-	4	6	10
	F	-	-	-	-	-	-	-	6	9	12	27
M13 Other arthritis	M	-	-	-	-	-	-	-	-	-	2	2
	F	-	-	-	-	-	-	-	-	-	4	4
M19 Other arthrosis	M	-	-	-	-	-	-	-	-	1	3	4
	F	-	-	-	-	-	-	-	-	1	9	10
M31 Other necrotizing vasculopathies	M	-	-	-	-	-	-	1	1	2	-	4
	F	-	-	-	-	-	-	-	1	1	6	8
M32 Systemic lupus erythematosus	M	-	-	-	-	-	-	-	-	2	-	2
	F	-	-	-	-	1	-	1	1	4	1	8
M34 Systemic sclerosis	M	-	-	-	-	-	-	-	1	1	1	3
	F	-	-	-	-	-	-	-	6	4	5	15
M60 Myositis	M	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	1	2	2	5
M62 Other disorders of muscle	M	-	-	-	-	-	-	-	1	1	1	3
	F	-	-	-	-	-	-	-	-	2	-	2
M80 Osteoporosis with pathological fracture	M	-	-	-	-	-	-	-	-	-	5	5
	F	-	-	-	-	-	-	-	-	1	9	10
M81 Osteoporosis without pathological fracture	M	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-	-	8	8
M86 Osteomyelitis	M	-	-	-	-	-	-	-	5	-	-	5
	F	-	-	-	-	-	-	-	-	3	1	4
N03 Chronic nephritic syndrome	M	-	-	-	-	-	-	-	-	3	12	15
	F	-	-	-	-	-	-	-	1	2	16	19
N05 Unspecified nephritic syndrome	M	-	-	-	-	-	-	1	-	-	2	3
	F	-	-	-	-	-	-	-	1	2	-	3
N12 Tubulo-interstitial nephritis, not specified as acute or chronic	M	-	-	-	-	-	-	-	-	1	5	6
	F	-	-	-	-	-	-	-	-	2	8	10
N13 Obstructive and reflux uropathy	M	-	-	-	-	-	-	-	-	4	4	8
	F	-	-	-	-	-	-	-	1	1	2	4
N17 Acute renal failure	M	-	-	-	-	-	-	-	4	7	15	26
	F	-	-	-	-	-	-	-	1	4	14	19
N18 Chronic renal failure	M	-	-	-	-	-	-	-	6	20	62	88
	F	-	-	-	-	-	-	1	-	31	53	85
N19 Unspecified renal failure	M	-	-	-	-	-	-	1	6	14	42	63
	F	-	-	-	-	-	-	-	2	14	40	56
N39 Other disorders of urinary system	M	-	-	-	-	-	1	-	2	16	79	98
	F	-	-	-	-	-	-	-	5	23	135	163
N40 Prostatic hypertrophy	M	-	-	-	-	-	-	-	1	2	6	9
	F	-	-	-	-	-	-	-	-	-	-	-
P01 Fetus & newborn affected by maternal complications of pregnancy	M	10	-	-	-	-	-	-	-	-	-	10
	F	4	-	-	-	-	-	-	-	-	-	4
P02 Fetus and newborn affected by compl. of placenta, cord & membranes	M	7	-	-	-	-	-	-	-	-	-	7
	F	11	-	-	-	-	-	-	-	-	-	11
P07 Disorders related to short gestation & low birth weight, NEC	M	10	-	-	-	-	-	-	-	-	-	10
	F	12	-	-	-	-	-	-	-	-	-	12
P91 Other disturbances of cerebral status of newborn	M	2	-	-	-	-	-	-	-	-	-	2
	F	3	-	-	-	-	-	-	-	-	-	3

Notes are included at end of Appendix 2.

APPENDIX 2 – *continued*

DETAILED CAUSE OF DEATH BY GENDER AND AGE

BRITISH COLUMBIA, 2009

ICD-10	Cause of Death	Gender	Age of Deceased (in Years)										Total
			<1	1–4	5–9	10–14	15–19	20–24	25–44	45–64	65–79	80+	
P96	Other conditions originating in the perinatal period	M	4	-	-	-	-	-	-	-	-	-	4
		F	6	-	-	-	-	-	-	-	-	-	6
Q20	Congenital malformations of cardiac chambers and connections	M	1	-	-	-	-	-	-	-	-	-	1
		F	3	-	-	-	1	-	-	-	-	-	4
Q21	Congenital malformations of cardiac septa	M	1	-	-	-	-	-	3	2	-	1	7
		F	1	-	-	-	-	-	1	-	-	1	3
Q24	Other congenital malformations of heart	M	2	-	-	-	-	1	1	1	-	-	5
		F	-	-	-	-	-	-	-	-	-	-	-
Q28	Other congenital malformations of circulatory system	M	-	-	-	-	-	-	-	1	2	-	3
		F	-	-	-	-	-	-	-	2	-	-	2
Q61	Cystic kidney disease	M	1	-	-	-	-	-	2	2	2	1	8
		F	1	-	-	-	-	-	-	-	1	1	3
Q87	Other specified malformation syndromes affecting multiple systems	M	-	1	-	-	-	1	1	-	2	-	5
		F	1	-	-	-	-	-	-	1	-	-	2
Q90	Down's syndrome	M	-	-	-	-	-	-	-	1	-	-	1
		F	1	-	-	-	-	-	-	4	-	-	5
R09	Other symptoms and signs involving the circulatory & respiratory systems	M	-	-	-	-	-	-	-	-	1	2	3
		F	-	-	-	-	-	-	-	-	-	5	5
R53	Malaise and fatigue	M	-	-	-	-	-	-	-	-	-	3	3
		F	-	-	-	-	-	-	-	-	-	5	5
R54	Senility	M	-	-	-	-	-	-	-	-	-	15	15
		F	-	-	-	-	-	-	-	-	1	22	23
R68	Other general symptoms and signs	M	-	-	-	-	-	-	-	-	-	1	1
		F	-	-	-	-	-	-	-	-	1	6	7
R95	Sudden infant death syndrome (SIDS)[1]	M	6	-	-	-	-	-	-	-	-	-	6
		F	4	-	-	-	-	-	-	-	-	-	4
R99	Other ill-defined and unspecified causes of mortality	M	9	4	2	2	15	29	128	202	81	50	522
		F	9	2	-	3	4	11	55	99	38	64	285
V03	Pedestrian injured in collision with car, pick-up truck or van	M	-	-	-	-	-	1	1	1	2	4	9
		F	-	1	-	-	1	-	1	1	3	4	11
V04	Pedestrian injured in collision with heavy transport vehicle or bus	M	-	-	-	-	1	-	1	-	2	1	5
		F	-	-	-	1	-	-	-	-	-	1	2
V13	Pedal cyclist injured in collision with car, pick-up truck or van	M	-	1	1	1	-	-	1	1	-	-	5
		F	-	-	-	-	-	-	-	1	-	-	1
V23	Motorcycle rider injured in collision with car, pick-up truck or van	M	-	-	-	-	-	2	5	3	-	-	10
		F	-	-	-	-	-	-	-	1	-	-	1
V27	Motorcycle rider injured in collision with fixed or stationary object	M	-	-	-	-	1	-	3	1	1	-	6
		F	-	-	-	-	-	-	-	1	-	-	1
V28	Motorcycle rider injured in noncollision transport accident	M	-	-	-	-	-	-	2	4	-	-	6
		F	-	-	-	-	-	-	-	-	-	-	-
V43	Car occupant injured in collision with car, pick-up truck or van	M	-	-	-	2	2	-	5	6	3	2	20
		F	-	-	-	-	1	2	7	2	4	2	18
V44	Car occupant injured in collision with heavy transport vehicle or bus	M	-	-	-	-	1	2	2	3	2	-	10
		F	-	-	-	-	1	1	1	1	3	1	8
V47	Car occupant injured in collision with fixed or stationary object	M	-	-	-	-	2	5	2	4	1	1	15
		F	-	-	-	-	-	2	1	3	1	1	8
V48	Car occupant injured in noncollision transport	M	-	-	-	-	6	2	10	8	1	4	31
		F	-	-	-	-	-	3	1	-	2	1	7
V53	Occ. of pick-up truck or van injured in collision with car, pick-up truck or van	M	-	-	-	-	-	-	3	1	-	1	5
		F	-	-	-	-	-	-	2	-	1	-	3
V54	Occ. of pick-up truck or van injured in coll. with heavy transport vehicle or bus	M	-	-	-	-	-	-	2	2	-	-	4
		F	-	-	-	-	-	-	1	-	-	-	1
V58	Occ. of pick-up truck or van injured in noncollision transport accident	M	-	-	-	-	-	-	6	8	-	-	14
		F	-	-	-	-	-	-	2	-	-	-	2
V86	Occupant of special A.T./other m.v. for off-road use, injured in transport acc.	M	-	-	-	-	1	3	1	8	1	1	15
		F	-	-	-	-	-	-	1	-	-	-	1
V95	Accident to powered aircraft causing injury to occupant	M	-	-	-	-	-	-	1	1	-	1	3
		F	1	-	-	-	-	-	1	1	-	-	3
W00	Fall on same level involving ice and snow	M	-	-	-	-	-	-	-	3	-	4	7
		F	-	-	-	-	-	-	1	-	-	-	1
W01	Fall on same level from slipping, tripping and stumbling	M	-	-	-	-	-	-	-	-	1	6	7
		F	-	-	-	-	-	-	-	-	-	13	13

Notes are included at end of Appendix 2.

APPENDIX 2 – *continued*

DETAILED CAUSE OF DEATH BY GENDER AND AGE

BRITISH COLUMBIA, 2009

ICD-10	Cause of Death	Gender	Age of Deceased (in Years) <1	1–4	5–9	10–14	15–19	20–24	25–44	45–64	65–79	80+	Total
W05	Fall involving wheelchair	M	-	-	-	-	-	-	-	1	2	3	6
		F	-	-	-	-	-	-	-	-	1	3	4
W06	Fall involving bed	M	-	-	-	-	-	-	-	1	1	4	6
		F	-	-	-	-	-	-	-	-	2	10	12
W07	Fall involving chair	M	-	-	-	-	-	-	-	-	3	-	3
		F	-	-	-	-	-	-	-	-	2	4	6
W08	Fall involving other furniture	M	-	-	-	-	-	-	1	-	1	1	3
		F	-	-	-	-	-	-	-	1	-	2	3
W10	Fall on and from stairs and steps	M	-	-	-	-	-	-	1	6	7	8	22
		F	-	-	-	-	-	-	-	2	6	1	9
W11	Fall on and from ladder	M	-	-	-	-	-	-	1	1	3	5	10
		F	-	-	-	-	-	-	-	1	-	-	1
W17	Other fall from one level to another	M	-	-	-	-	-	-	1	1	2	1	5
		F	-	-	-	-	-	-	1	1	-	2	4
W18	Other fall on same level	M	-	-	-	1	-	-	-	-	2	10	13
		F	-	-	-	-	-	-	-	-	6	13	19
W19	Unspecified fall	M	-	-	-	-	-	2	4	11	21	73	111
		F	-	-	-	-	-	-	-	7	19	114	140
W20	Struck by thrown, projected or falling object	M	-	-	-	1	-	1	1	-	2	-	5
		F	-	-	-	-	-	-	-	2	1	-	3
W69	Drowning and submersion while in natural water	M	-	-	-	-	2	1	1	4	1	-	9
		F	-	-	-	-	-	-	-	-	-	-	-
W70	Drowning and submersion following fall into natural water	M	-	-	1	-	-	1	1	5	1	-	9
		F	-	-	-	-	-	-	1	1	-	-	2
W80	Inhalation & ingest. of other objects causing obstruction of respiratory tract	M	-	-	-	-	-	-	-	5	2	5	12
		F	-	-	-	-	-	-	1	-	3	4	8
X00	Exposure to uncontrolled fire in building or structure	M	-	-	-	-	1	-	-	7	1	1	10
		F	-	-	1	-	-	1	4	3	2	1	12
X31	Exposure to excessive natural cold	M	-	-	-	-	1	1	-	6	1	-	9
		F	-	-	-	-	-	-	-	1	1	-	2
X41	Acc. pois. by & exp. to antiepileptic, sed.-hypn., antipark. & psyc. drugs, NEC	M	-	-	-	-	1	1	6	7	1	-	16
		F	-	-	-	-	-	1	3	7	2	-	13
X42	Acc. poisoning by & exp. to narcotics & psychodysleptics [hallucin.], NEC	M	-	-	-	-	-	4	51	45	3	-	103
		F	-	-	-	-	-	4	16	11	1	1	33
X44	Acc. poisoning by & exp. to other & unspec. drugs, medic. and biolo. sub.	M	-	-	-	-	1	2	14	23	3	1	44
		F	-	-	-	-	1	1	10	20	1	-	33
X45	Accidental poisoning by and exposure to alcohol	M	-	-	-	-	1	-	6	8	-	-	15
		F	-	-	-	-	-	-	4	1	1	-	6
X59	Exposure to unspecified factor	M	-	-	-	-	-	-	-	2	6	6	14
		F	-	-	-	-	-	-	-	-	-	8	8
X61	Suicide by antiepileptic, sed-hypno, antipark. and psyc. drugs, NEC	M	-	-	-	-	-	-	3	2	1	2	8
		F	-	-	-	-	-	-	3	9	2	1	15
X62	Suicide by narcotics and psyc. [hallucinogens], NEC	M	-	-	-	-	-	-	1	3	-	1	5
		F	-	-	-	-	-	-	1	1	-	-	2
X64	Suicide by other & unspecified drugs, medicaments & biological substances	M	-	-	-	-	-	2	9	16	2	1	30
		F	-	-	-	-	-	2	5	7	2	1	17
X67	Suicide by other gases and vapours	M	-	-	-	-	-	-	8	10	7	-	25
		F	-	-	-	-	-	-	-	2	-	-	2
X70	Suicide by hanging, strangulation and suffocation	M	-	-	-	-	7	11	76	60	9	2	165
		F	-	-	-	-	2	1	22	7	1	2	35
X71	Suicide by drowning and submersion	M	-	-	-	-	-	2	2	1	1	1	7
		F	-	-	-	-	-	-	-	2	-	-	2
X72	Suicide by handgun discharge	M	-	-	-	-	-	-	1	3	3	2	9
		F	-	-	-	-	-	-	1	-	-	-	1
X73	Suicide by rifle, shotgun and larger firearm discharge	M	-	-	-	-	2	1	4	8	5	2	22
		F	-	-	-	-	-	-	-	-	-	-	-
X74	Suicide by other and unspecified firearm discharge	M	-	-	-	-	3	1	4	12	6	-	26
		F	-	-	-	-	-	-	-	3	1	-	4
X78	Suicide by sharp object	M	-	-	-	-	-	-	4	8	-	-	12
		F	-	-	-	-	-	1	-	1	2	-	4
X80	Suicide by jumping from a high place	M	-	-	-	-	1	2	6	10	4	1	24
		F	-	-	-	-	-	-	6	1	1	1	9

Notes are included at end of Appendix 2.

APPENDIX 2 – *continued*

DETAILED CAUSE OF DEATH BY GENDER AND AGE

BRITISH COLUMBIA, 2009

ICD-10 Cause of Death	Gender	Age of Deceased (in Years) <1	1–4	5–9	10–14	15–19	20–24	25–44	45–64	65–79	80+	Total
X81 Suicide by jumping or lying before moving object	M	-	-	-	-	1	-	2	1	1	-	5
	F	-	-	-	-	-	-	1	-	-	-	1
X83 Suicide by other specified means	M	-	-	-	-	-	-	-	3	1	2	6
	F	-	-	-	-	-	-	-	-	-	-	-
X95 Assault by other and unspecified firearm discharge	M	-	-	-	-	3	7	18	3	1	-	32
	F	-	-	-	-	-	1	3	1	-	-	5
X99 Assault by sharp object	M	-	-	-	-	1	3	6	-	1	-	11
	F	-	-	-	-	-	1	2	1	1	-	5
Y09 Assault by unspecified means	M	1	-	-	-	-	1	2	3	-	-	7
	F	-	-	-	-	-	-	1	-	-	-	1
Y11 Pois. by & expo. to antiepilep., sedative-hypnotic, antipark. & psyc. drugs, NEC	M	-	-	-	-	-	-	2	-	-	-	2
	F	-	-	-	-	-	-	1	3	-	-	4
Y12 Pois. by and expo. to narcotics & psyc. [hallucinogens], NEC, undeter. intent	M	-	-	-	-	-	1	2	2	-	-	5
	F	-	-	-	-	-	-	-	-	-	-	-
Y83 Surg. oper & othr. surg. proc. caus. abno. reac. or later compl., w/o misadventure	M	-	-	-	-	-	-	-	1	1	5	7
	F	-	-	-	-	-	-	-	-	3	6	9
Y85 Sequelae of transport accidents	M	-	-	-	-	1	-	2	4	2	-	9
	F	-	-	-	-	-	-	-	-	1	-	1
Y86 Sequelae of other accidents	M	-	-	-	-	-	1	1	3	-	1	6
	F	-	-	-	-	-	-	-	-	-	1	1
Y87 Sequelae of intent. self-harm, assault and events of undetermined intent	M	-	-	-	-	-	-	1	3	2	-	6
	F	-	-	-	-	-	-	-	-	-	-	-
All Causes of Death	M	**70**	**9**	**17**	**11**	**77**	**113**	**715**	**3,175**	**4,943**	**6,861**	**15,991**
	F	**81**	**16**	**2**	**10**	**20**	**52**	**386**	**2,023**	**3,465**	**9,181**	**15,236**

Note: The output from ICD-10 mortality coding and underlying cause of death selection was modified in British Columbia to reflect the intent of certifiers in this jurisdiction and to provide greater continuity over time. Data using the standard ICD-10 rules for such categories as pneumonia/influenza, diabetes, or cancer should not be compared to the numbers shown above.
Non-residents and unknown gender are excluded.
[1]The BC Coroners' Service classifies SIDS deaths as "SUDI" - please see glossary (under "SIDS") for explanation.

Appendix Three

Selected Health Status Indicators by Local Health Area, Health Service Delivery Area and Health Authority

British Columbia, 2005-2009

Preamble to Appendix 3

This appendix consists of six tables:

Table A Summary Statistics by Local Health Area

Table B Mortality Statistics by Local Health Area

Table C Summary Statistics by Health Service Delivery Area

Table D Mortality Statistics by Health Service Delivery Area

Table E Summary Statistics by Health Authority

Table F Mortality Statistics by Health Authority

Assignment of events to geographic areas was based on the usual residence of the mother for live births and stillbirths, and the usual residence of the decedent for deaths.

Tables A, C, and E provide population estimates for the current year, and counts and rates for the five-year period ending with the current year for live births, stillbirths, deaths, infant deaths, low birth weight live births, cesarean live birth deliveries, pre-term live births, live births to teenage mothers, and live births to elderly gravida (mothers aged 35 or older).

Tables B, D, and F provide the SMR with statistical significance, number of deaths, trends in ASMR based on three-year moving averages from 1986 to the current year (in the column labelled TR), PYLLI with statistical significance, and the number of deaths under age 75. ICD-10 codes for the causes of death in these tables are listed below.

Category	Cause of Death	ICD-10 Codes
01	All causes of death	A00-Y89
02	Malignant neoplasms	C00-C97
03	Malignant neoplasm of lung	C34
04	Endocrine nutritional and metabolic diseases	E00-E89
05	Diabetes mellitus	E10-E14
06	Diseases of the circulatory system	I00-I99
07	Ischemic heart diseases	I20-I25
08	Cerebrovascular diseases	I60-I69
09	Diseases of arteries, arterioles and capillaries	I70-I78
10	Diseases of the respiratory system	J00-J98
11	Influenza and pneumonia	J10-J18
12	Chronic Pulmonary Disease	J40-J44
13	Diseases of the digestive system	K00-K92
14	Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850
15	Unintentional falls	W00-W19
16	Suicide	X60-X84, Y870
17	Alcohol-related deaths	see Glossary
18	Medically treatable diseases	see Glossary
19	Drug-induced deaths	see Glossary

Note: Some cause of death categories are different from those used previously, so readers should avoid comparisons with tables in earlier publications.

Table A

SUMMARY STATISTICS BY LOCAL HEALTH AREA, BRITISH COLUMBIA, 2005-2009

	Local Health Area	2009 Population	Live Birth Total	Live Birth Rate	Stillbirth Total	Stillbirth Rate[2]	Death Total	Death Rate	Infant Death Total	Infant Death Rate[1]
001	Fernie	14,893	715	9.85	3	4.18	433	5.97	3	4.20
002	Cranbrook	25,753	1,224	9.80	10	8.10	1,054	8.44	5	4.08
003	Kimberley	8,585	370	9.04	-	-	411	10.04	1	2.70
004	Windermere	10,722	434	8.82	5	11.39	253	5.14	1	2.30
005	Creston	12,669	595	9.72	-	-	747	12.20	-	-
006	Kootenay Lake	3,848	137	7.33	1	7.25	161	8.62	-	-
007	Nelson	25,120	1,168	9.61	9	7.65	935	7.69	-	-
009	Castlegar	13,445	456	7.03	4	8.70	623	9.61	1	2.19
010	Arrow Lakes	4,781	156	6.63	-	-	231	9.82	-	-
011	Trail	19,378	800	8.39	7	8.67	1,093	11.48	2	2.50
012	Grand Forks	9,036	309	6.98	2	6.43	515	11.63	4	12.94
013	Kettle Valley	3,697	110	6.14	1	9.01	126	7.04	-	-
014	Southern Okanagan	19,815	632	6.61	7	10.95	1,300	13.60	1	1.58
015	Penticton	41,648	1,637	8.04	10	6.07	2,662	13.07	10	6.11
016	Keremeos	5,242	189	7.51	1	5.26	344	13.67	-	-
017	Princeton	5,059	134	5.41	1	7.41	296	11.94	-	-
018	Golden	7,374	348	9.76	1	2.87	208	5.83	2	5.75
019	Revelstoke	7,928	382	9.66	2	5.21	259	6.55	5	13.09
020	Salmon Arm	34,914	1,318	7.88	9	6.78	1,632	9.76	9	6.83
021	Armstrong-Spallumcheen	9,679	420	8.90	2	4.74	392	8.31	-	-
022	Vernon	65,877	2,773	8.74	22	7.87	3,107	9.79	15	5.41
023	Central Okanagan	184,279	7,745	8.92	58	7.43	7,411	8.53	29	3.74
024	Kamloops	110,846	4,979	9.28	30	5.99	4,129	7.70	17	3.41
025	100 Mile House	14,756	509	7.04	4	7.80	649	8.98	1	1.96
026	North Thompson	4,309	227	10.62	-	-	193	9.03	1	4.41
027	Cariboo-Chilcotin	26,730	1,448	10.97	17	11.60	922	6.98	11	7.60
028	Quesnel	23,584	1,251	10.80	14	11.07	881	7.61	6	4.80
029	Lillooet	4,425	237	10.93	2	8.37	211	9.73	1	4.22
030	South Cariboo	7,413	306	8.52	5	16.08	357	9.94	3	9.80
031	Merritt	11,718	609	10.62	3	4.90	550	9.59	-	-
032	Hope	8,205	366	9.06	4	10.81	527	13.04	2	5.46
033	Chilliwack	84,624	4,970	12.25	37	7.39	3,530	8.70	16	3.22
034	Abbotsford	135,956	8,472	12.81	78	9.12	4,626	7.00	32	3.78
035	Langley	129,390	6,714	10.76	36	5.33	4,460	7.15	21	3.13
037	Delta	100,635	4,353	8.68	33	7.52	3,131	6.24	12	2.76
038	Richmond	193,255	8,391	9.00	70	8.27	4,479	4.80	27	3.22
040	New Westminster	65,016	3,383	10.88	28	8.21	2,544	8.18	8	2.36
041	Burnaby	222,802	11,167	10.39	77	6.85	6,889	6.41	30	2.69
042	Maple Ridge	93,271	4,694	10.46	37	7.82	2,839	6.33	13	2.77
043	Coquitlam	215,558	10,489	10.03	81	7.66	4,758	4.55	36	3.43
044	North Vancouver	138,055	6,023	8.88	51	8.40	4,143	6.11	14	2.32
045	West Vancouver-Bowen Is.	51,396	1,390	5.48	7	5.01	2,351	9.27	3	2.16
046	Sunshine Coast	29,551	1,050	7.36	5	4.74	1,349	9.46	5	4.76
047	Powell River	19,828	682	7.00	4	5.83	996	10.22	3	4.40
048	Howe Sound	34,784	2,233	13.54	23	10.20	607	3.68	13	5.82
049	Bella Coola Valley	2,893	221	15.10	5	22.12	103	7.04	3	13.57
050	Queen Charlotte	4,652	225	9.44	1	4.42	168	7.05	4	17.78
051	Snow Country	490	27	9.98	-	-	16	5.91	1	37.04
052	Prince Rupert	14,242	864	11.95	4	4.61	472	6.53	2	2.31
053	Upper Skeena	5,408	329	12.17	3	9.04	128	4.73	2	6.08
054	Smithers	15,970	1,085	13.57	11	10.04	451	5.64	6	5.53
055	Burns Lake	7,880	446	11.40	3	6.68	280	7.16	3	6.73
056	Nechako	15,010	1,091	14.46	8	7.28	536	7.10	6	5.50
057	Prince George	96,107	5,525	11.56	46	8.26	2,769	5.80	18	3.26
059	Peace River South	26,976	1,605	12.13	8	4.96	828	6.26	6	3.74
060	Peace River North	34,813	2,895	17.35	24	8.22	732	4.39	13	4.49
061	Greater Victoria	221,553	8,973	8.21	75	8.29	10,785	9.87	42	4.68
062	Sooke	66,718	3,430	10.89	12	3.49	1,711	5.43	12	3.50
063	Saanich	63,599	1,949	6.17	14	7.13	3,246	10.28	14	7.18
064	Gulf Islands	15,708	438	5.79	3	6.80	682	9.01	1	2.28
065	Cowichan	56,900	2,659	9.59	32	11.89	2,294	8.27	14	5.27
066	Lake Cowichan	6,423	219	7.05	-	-	212	6.82	2	9.13
067	Ladysmith	18,366	752	8.44	6	7.92	1,108	12.43	6	7.98
068	Nanaimo	102,889	4,414	8.85	32	7.20	4,494	9.01	19	4.30
069	Qualicum	45,356	1,242	5.66	8	6.40	2,584	11.69	3	2.42
070	Alberni	31,542	1,681	10.77	25	14.65	1,424	9.13	18	10.71
071	Courtenay	64,084	2,432	7.87	21	8.56	2,565	8.30	6	2.47
072	Campbell River	41,580	1,931	9.51	13	6.69	1,531	7.54	11	5.70
075	Mission	42,217	2,279	11.11	21	9.13	1,430	6.97	8	3.51
076	Agassiz-Harrison	8,991	484	11.03	2	4.12	337	7.68	1	2.07
077	Summerland	11,706	366	6.37	1	2.72	683	11.88	1	2.73
078	Enderby	7,640	377	10.10	3	7.89	393	10.53	-	-
080	Kitimat	10,297	474	9.10	4	8.37	306	5.87	-	-
081	Fort Nelson	6,116	497	15.83	2	4.01	106	3.38	1	2.01
083	Central Coast	1,467	149	20.01	1	6.67	62	8.33	2	13.42
084	Vancouver Island West	2,364	113	9.73	-	-	67	5.77	1	8.85
085	Vancouver Island North	12,287	766	12.47	6	7.77	415	6.76	2	2.61
087	Stikine	1,011	31	6.00	-	-	22	4.26	-	-
088	Terrace	20,277	1,237	12.32	12	9.61	670	6.67	5	4.04
092	Nisga'a	1,968	174	17.78	3	16.95	73	7.46	1	5.75
094	Telegraph Creek	692	49	14.14	2	39.22	20	5.77	-	-
161	Vancouver City Centre	119,350	4,681	8.22	42	8.89	3,149	5.53	12	2.56
162	Van. Downtown E. Side	64,648	2,418	8.19	31	12.66	2,513	8.51	10	4.14
163	Vancouver North East	104,641	5,526	10.84	47	8.43	2,893	5.67	26	4.70
164	Vancouver West Side	133,161	5,720	8.78	47	8.15	3,726	5.72	23	4.02
165	Vancouver Midtown	88,202	5,155	12.10	47	9.03	2,281	5.35	31	6.01
166	Vancouver South	133,206	6,599	9.97	62	9.31	4,218	6.37	32	4.85
201	Surrey	381,707	24,513	13.52	200	8.09	8,767	4.83	114	4.65
202	South Surrey/White Rock	84,251	2,663	6.59	17	6.34	4,290	10.61	5	1.88
	PROVINCIAL TOTAL	**4,455,207**	**214,744**	**9.95**	**1,708**	**7.89**	**154,885**	**7.17**	**850**	**3.96**

Please refer to footnotes on Table E

Table A

SUMMARY STATISTICS BY LOCAL HEALTH AREA, BRITISH COLUMBIA, 2005-2009

		Low Birth Wt. Live Birth		Cesarean		Pre-term		Teenage Mother		Elderly Gravida	
	Local Health Area	Total	Rate[1]	Total	Rate[1]	Total	Rate[1]	Total	Rate[1]	Total	Rate[1]
001	Fernie	28	39.16	248	346.85	43	60.14	25	34.97	102	142.66
002	Cranbrook	71	58.01	394	321.90	92	75.16	94	76.80	159	129.90
003	Kimberley	26	70.27	110	297.30	28	75.68	14	37.84	73	197.30
004	Windermere	28	64.52	117	269.59	38	87.56	17	39.17	55	126.73
005	Creston	39	65.55	133	223.53	46	77.31	59	99.16	71	119.33
006	Kootenay Lake	4	29.20	24	175.18	5	36.50	1	7.30	28	204.38
007	Nelson	57	48.80	259	221.75	63	53.94	36	30.82	245	209.76
009	Castlegar	17	37.28	131	287.28	29	63.60	6	13.16	62	135.96
010	Arrow Lakes	8	51.28	43	275.64	11	70.51	5	32.05	28	179.49
011	Trail	51	63.75	221	276.25	64	80.00	41	51.25	118	147.50
012	Grand Forks	13	42.07	75	242.72	18	58.25	17	55.02	52	168.28
013	Kettle Valley	2	18.18	18	163.64	8	72.73	4	36.36	16	145.45
014	Southern Okanagan	52	82.28	178	281.65	52	82.28	41	64.87	95	150.32
015	Penticton	74	45.20	466	284.67	128	78.19	76	46.43	248	151.50
016	Keremeos	11	58.20	55	291.01	15	79.37	10	52.91	20	105.82
017	Princeton	14	104.48	28	208.96	19	141.79	16	119.40	16	119.40
018	Golden	19	54.60	111	318.97	21	60.34	11	31.61	66	189.66
019	Revelstoke	17	44.50	113	295.81	22	57.59	22	57.59	54	141.36
020	Salmon Arm	65	49.32	479	363.43	101	76.63	68	51.59	204	154.78
021	Armstrong-Spallumcheen	17	40.48	142	338.10	20	47.62	18	42.86	45	107.14
022	Vernon	132	47.60	874	315.18	193	69.60	133	47.96	413	148.94
023	Central Okanagan	400	51.65	2,337	301.74	564	72.82	290	37.44	1,376	177.66
024	Kamloops	283	56.84	1,780	357.50	397	79.73	213	42.78	753	151.24
025	100 Mile House	31	60.90	150	294.70	45	88.41	31	60.90	61	119.84
026	North Thompson	13	57.27	62	273.13	13	57.27	12	52.86	27	118.94
027	Cariboo-Chilcotin	86	59.39	420	290.06	149	102.90	133	91.85	157	108.43
028	Quesnel	71	56.75	349	278.98	92	73.54	114	91.13	124	99.12
029	Lillooet	13	54.85	70	295.36	18	75.95	23	97.05	22	92.83
030	South Cariboo	23	75.16	76	248.37	30	98.04	32	104.58	24	78.43
031	Merritt	25	41.05	176	289.00	45	73.89	61	100.16	71	116.58
032	Hope	18	49.18	93	254.10	34	92.90	41	112.02	39	106.56
033	Chilliwack	246	49.50	1,427	287.12	387	77.87	272	54.73	662	133.20
034	Abbotsford	432	50.99	2,333	275.38	585	69.05	287	33.88	1,044	123.23
035	Langley	354	52.73	1,927	287.01	449	66.88	154	22.94	1,322	196.90
037	Delta	255	58.58	1,504	345.51	318	73.05	59	13.55	1,149	263.96
038	Richmond	467	55.65	2,631	313.55	582	69.36	58	6.91	2,622	312.48
040	New Westminster	212	62.67	1,040	307.42	289	85.43	65	19.21	930	274.90
041	Burnaby	636	56.95	3,427	306.89	799	71.55	129	11.55	3,314	296.77
042	Maple Ridge	266	56.67	1,505	320.62	374	79.68	113	24.07	1,011	215.38
043	Coquitlam	633	60.35	3,489	332.63	813	77.51	130	12.39	3,060	291.73
044	North Vancouver	337	55.95	1,927	319.94	448	74.38	49	8.14	2,287	379.71
045	West Vancouver-Bowen Is.	64	46.04	453	325.90	92	66.19	28	20.14	614	441.73
046	Sunshine Coast	44	41.90	310	295.24	78	74.29	45	42.86	241	229.52
047	Powell River	28	41.06	194	284.46	44	64.52	35	51.32	103	151.03
048	Howe Sound	99	44.33	750	335.87	164	73.44	63	28.21	627	280.79
049	Bella Coola Valley	18	81.45	45	203.62	31	140.27	37	167.42	35	158.37
050	Queen Charlotte	9	40.00	62	275.56	16	71.11	14	62.22	42	186.67
051	Snow Country	3	111.11	10	370.37	1	37.04	2	74.07	5	185.19
052	Prince Rupert	32	37.04	252	291.67	75	86.81	106	122.69	116	134.26
053	Upper Skeena	12	36.47	79	240.12	23	69.91	43	130.70	41	124.62
054	Smithers	55	50.69	317	292.17	75	69.12	71	65.44	167	153.92
055	Burns Lake	24	53.81	98	219.73	33	73.99	32	71.75	49	109.87
056	Nechako	54	49.50	283	259.40	63	57.75	104	95.33	96	87.99
057	Prince George	304	55.02	1,593	288.33	382	69.14	356	64.43	701	126.88
059	Peace River South	65	40.50	413	257.32	82	51.09	129	80.37	159	99.07
060	Peace River North	125	43.18	844	291.54	131	45.25	204	70.47	278	96.03
061	Greater Victoria	451	50.26	3,128	348.60	683	76.12	233	25.97	2,259	251.76
062	Sooke	173	50.44	1,263	368.22	262	76.38	96	27.99	677	197.38
063	Saanich	102	52.33	597	306.31	160	82.09	73	37.46	465	238.58
064	Gulf Islands	21	47.95	101	230.59	22	50.23	14	31.96	115	262.56
065	Cowichan	156	58.67	657	247.09	257	96.65	196	73.71	462	173.75
066	Lake Cowichan	10	45.66	64	292.24	18	82.19	14	63.93	24	109.59
067	Ladysmith	45	59.84	191	253.99	79	105.05	51	67.82	109	144.95
068	Nanaimo	223	50.52	1,240	280.92	375	84.96	219	49.61	696	157.68
069	Qualicum	71	57.17	343	276.17	91	73.27	41	33.01	243	195.65
070	Alberni	86	51.16	460	273.65	162	96.37	159	94.59	221	131.47
071	Courtenay	115	47.29	614	252.47	152	62.50	104	42.76	452	185.86
072	Campbell River	108	55.93	657	340.24	129	66.80	132	68.36	254	131.54
075	Mission	112	49.14	648	284.34	168	73.72	107	46.95	338	148.31
076	Agassiz-Harrison	33	68.18	141	291.32	53	109.50	49	101.24	69	142.56
077	Summerland	16	43.72	103	281.42	19	51.91	21	57.38	70	191.26
078	Enderby	14	37.14	106	281.17	31	82.23	24	63.66	54	143.24
080	Kitimat	21	44.30	173	364.98	31	65.40	44	92.83	60	126.58
081	Fort Nelson	21	42.25	189	380.28	28	56.34	48	96.58	54	108.65
083	Central Coast	5	33.56	38	255.03	17	114.09	16	107.38	10	67.11
084	Vancouver Island West	4	35.40	28	247.79	10	88.50	19	168.14	12	106.19
085	Vancouver Island North	42	54.83	167	218.02	64	83.55	98	127.94	102	133.16
087	Stikine	3	96.77	6	193.55	4	129.03	2	64.52	2	64.52
088	Terrace	63	50.93	259	209.38	96	77.61	130	105.09	131	105.90
092	Nisga'a	8	45.98	30	172.41	17	97.70	36	206.90	14	80.46
094	Telegraph Creek	-	0.00	9	183.67	1	20.41	6	122.45	7	142.86
161	Vancouver City Centre	243	51.91	1,456	311.04	338	72.21	23	4.91	1,598	341.38
162	Van. Downtown E. Side	153	63.28	612	253.10	238	98.43	69	28.54	800	330.85
163	Vancouver North East	364	65.85	1,623	293.60	456	82.49	86	15.56	1,720	311.14
164	Vancouver West Side	294	51.40	1,758	307.34	414	72.38	24	4.20	2,615	457.17
165	Vancouver Midtown	322	62.46	1,534	297.58	437	84.77	49	9.51	1,819	352.86
166	Vancouver South	458	69.40	1,957	296.56	539	81.68	106	16.06	1,989	301.41
201	Surrey	1,597	65.15	7,905	322.48	1,909	77.88	575	23.46	4,137	168.77
202	South Surrey/White Rock	158	59.33	921	345.85	235	88.25	31	11.64	831	312.05
	PROVINCIAL TOTAL	**11,976**	**55.77**	**65,634**	**305.64**	**16,236**	**75.61**	**7,149**	**33.29**	**47,918**	**223.14**

Please refer to footnotes on Table E

Table B

MORTALITY STATISTICS BY LOCAL HEALTH AREA, British Columbia, 2005-2009

Local Health Area		01 All Causes of Death							02 All Cancer Sites							03 Lung Cancer							04 End/Nut/Met. Diseases						
		SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75
001	Fernie	1.08		433		1.05		210	1.02		123		0.85		88	1.36		43		1.15		25	0.73		12		0.09	+	2
002	Cranbrook	1.15	*	1,054	↘	1.10		386	1.03		276		0.91		148	1.11		78		1.03		44	1.46	*	56		1.61		22
003	Kimberley	1.08		411		1.15		147	1.04		112		1.23		55	1.02		29		1.35		15	1.07		17		0.75		5
004	Windermere	0.78	*	253		0.63	*	99	0.75	*	78		0.58	*	35	0.74		20		0.24	*	7	0.43	*	6		0.34		1
005	Creston	1.09	*	747		1.32	*	276	0.92		179		1.16		101	0.87		45		1.11		28	1.34		39		1.38		15
006	Kootenay Lake	1.02		161		1.19		79	1.37	*	65		1.46		41	1.18		15		1.58		11	0.45		3		0.07	+	1
007	Nelson	1.06		935	↘	0.96		355	0.96		239		0.98		136	0.75	*	49		0.84		34	1.13		41		0.72		13
009	Castlegar	1.20	*	623		1.19		248	1.00		148		1.10		88	1.21		47		1.37		30	1.35		29		1.26		12
010	Arrow Lakes	1.04		231	↘	1.01		83	1.30	*	85		1.04		40	1.20		21		1.16		13	1.18		11	↗	0.89		2
011	Trail	1.20	*	1,093	↘	1.35	*	395	1.18	*	293		1.27	*	145	0.94		60		0.85		33	1.19		45		1.18		16
012	Grand Forks	1.13	*	515		1.35	*	192	0.92		123		0.88		65	0.73		26		0.89		20	0.98		19		1.07		5
013	Kettle Valley	0.84		126	↘	0.87		59	0.90		43		0.95		26	0.76		10		0.98		7	0.31		2	↘	0.22	+	1
014	Southern Okanagan	1.04		1,300	↘	1.21	*	425	1.08		388		1.09		172	1.31	*	125		1.45	*	64	1.23		65		0.65		14
015	Penticton	1.07	*	2,662		1.28	*	744	1.10	*	728		1.22	*	299	1.23	*	210	↗	1.03		86	1.19		123	↗	1.40		28
016	Keremeos	1.16	*	344		1.40	*	135	1.18		104		1.05		52	1.35		32		0.91		14	1.19		15		1.03		5
017	Princeton	1.19	*	296	↘	1.39	*	144	1.46	*	113		1.49	*	75	1.80	*	38		1.74		27	1.31		14		2.72		5
018	Golden	1.10		208	↘	1.08		100	1.12		63		1.18		39	0.88		13		0.95		11	1.55		12		0.66		4
019	Revelstoke	1.02		259	↘	1.01		109	1.04		77		0.76		38	1.13		22		0.71		12	1.15		12		1.00		6
020	Salmon Arm	1.01		1,632	↘	1.24	*	633	0.99		466		1.04		246	0.97		121		1.04		66	0.88		60		0.72		18
021	Armstrong-Spallumcheen	0.97		392	↘	1.13		145	0.96		112		0.87		52	0.81		25		0.77		15	0.71		12		0.36	+	3
022	Vernon	1.08	*	3,107	↘	1.15	*	1,091	1.01		816		1.02		404	1.03		218		1.10		124	1.25	*	150	↗	1.51		50
023	Central Okanagan	0.98		7,411	↘	1.00		2,481	1.01		2,131		1.01		1,010	0.99		545		1.10		305	0.89		280	↗	0.93		97
024	Kamloops	1.12	*	4,129	↘	1.17	*	1,772	1.05		1,149		1.01		612	1.21	*	353		1.15		197	1.25	*	192	↗	1.32		84
025	100 Mile House	1.17	*	649		1.35	*	336	1.09		195		1.26		127	1.10		54		1.11		34	0.75		18		0.34	*	6
026	North Thompson	1.38	*	193		1.52	*	94	1.10		48		1.41		34	1.27		15		1.97		11	0.85		5		0.61		1
027	Cariboo-Chilcotin	1.28	*	922	↘	1.54	*	497	1.07		240		0.97		150	1.25		75		1.40		59	1.75	*	53	↗	1.64		23
028	Quesnel	1.21	*	881	↘	1.35	*	430	1.21	*	267		1.31	*	167	1.48	*	87		1.46		53	1.45	*	44	↗	1.51		21
029	Lillooet	1.49	*	211		1.61	*	110	1.29		55		1.53		34	1.94	*	22	↗	2.58		17	1.35		8		1.01		4
030	South Cariboo	1.26	*	357		1.75	*	194	1.13		100		1.15		64	1.41		34		1.53		22	1.57		19	↗	1.86		11
031	Merritt	1.35	*	550		1.71	*	286	1.07		129		1.07		78	1.03		33		1.26		22	1.00		17		1.46		8
032	Hope	1.45	*	527		1.95	*	253	1.52	*	164		1.63	*	95	2.04	*	59		1.73	*	36	2.21	*	34		3.32	*	13
033	Chilliwack	1.14	*	3,530	↘	1.20	*	1,359	1.17	*	1,022		1.23	*	532	1.21	*	276		1.28	*	163	0.97		125		1.21		54
034	Abbotsford	1.01		4,626	↘	1.00		1,595	0.93	*	1,152		0.95		555	0.81	*	256		0.91		150	1.21	*	226	↗	1.13		84
035	Langley	1.05	*	4,460	↘	0.92	*	1,573	1.05		1,220	↘	1.03		635	1.08		324	↘	1.02		177	0.90		156		0.92		56
037	Delta	0.95	*	3,131	↘	0.78	*	1,084	0.96		941	↘	1.01		506	0.89		222	↘	0.95		132	0.82	*	111		1.01		46
038	Richmond	0.73	*	4,479	↘	0.59	*	1,539	0.80	*	1,377	↘	0.79	*	722	0.77	*	345	↘	0.70	*	188	0.76	*	190		0.56	*	73
040	New Westminster	1.15	*	2,544	↘	1.08		916	1.18	*	692		1.13		341	1.42	*	213		1.30	*	117	0.93		83		1.18		35
041	Burnaby	0.93	*	6,889	↘	0.74	*	2,169	0.88	*	1,788	↘	0.87	*	846	0.85	*	445	↘	0.84	*	222	0.96		289		0.98		100
042	Maple Ridge	1.13	*	2,839	↘	1.02		1,194	1.18	*	844		1.08		446	1.37	*	255		1.20		141	1.14		117		1.03		55
043	Coquitlam	0.91	*	4,758	↘	0.74	*	1,976	1.00		1,542	↘	0.91	*	869	1.02		406	↘	0.91		236	0.81	*	172		0.65	*	63
044	North Vancouver	0.90	*	4,143	↘	0.69	*	1,303	0.89	*	1,146	↘	0.83	*	576	0.75	*	250	↘	0.73	*	145	0.87		164		0.82		55
045	West Vancouver-Bowen Is.	0.83	*	2,351	↘	0.58	*	508	0.86	*	643	↘	0.79	*	255	0.51	*	99	↘	0.36	*	38	0.51	*	59		0.21	*	10
046	Sunshine Coast	0.97		1,349	↘	1.02		509	1.06		428		1.15		231	1.01		107		0.97		65	0.81		47		0.95		20
047	Powell River	1.09	*	996	↘	1.19	*	381	1.06		278		0.98		146	0.95		68		1.05		46	1.20		46		0.30	*	12
048	Howe Sound	1.03		607	↘	1.09		362	0.94		165	↘	0.74	*	96	0.95		43	↘	0.85		24	1.12		26		0.61	*	14
049	Bella Coola Valley	1.26	*	103	↘	2.19	*	71	0.99		25		1.48		21	0.89		6		1.27		6	1.18		4		1.31		2
050	Queen Charlotte	1.41	*	168		1.38	*	87	1.09		40		0.88		24	1.65		16		1.47		11	1.22		6		1.13		3
051	Snow Country	1.31		16		2.04		11	1.15		5		0.94		3	1.68		2		1.12		1	-		-		-		-
052	Prince Rupert	1.26	*	472	↘	1.34	*	252	1.18		133		1.05		77	1.21		36		0.87		25	1.88	*	29		2.25		16
053	Upper Skeena	1.05		128		1.28		75	0.87		33		0.98		22	1.08		11		0.63		9	2.17	*	11		2.94		6
054	Smithers	1.17	*	451		1.22	*	223	1.14		133		1.16		79	1.24		38		1.11		20	1.33		21	↗	1.27		10
055	Burns Lake	1.22	*	280		1.39	*	137	1.17		80		0.85		47	1.54	*	28		1.04		19	2.21	*	21	↗	1.22		7
056	Nechako	1.41	*	536		1.49	*	270	1.26	*	148		1.20		82	1.63	*	51		1.60		32	1.52		24		1.43		12
057	Prince George	1.23	*	2,769	↘	1.24	*	1,527	1.27	*	879		1.26	*	580	1.57	*	288		1.52	*	191	1.66	*	153		2.01	*	88
059	Peace River South	1.21	*	828		1.31	*	429	1.12		234		1.21		154	1.25		70		1.31		48	1.90	*	54	↗	1.78		21
060	Peace River North	1.19	*	732		1.25	*	418	1.30	*	236		1.22		159	1.28		60		1.50		48	1.18		29		0.80		13
061	Greater Victoria	1.01		10,785	↘	1.05	*	3,015	1.01		2,736	↘	1.05		1,182	0.98		661	↘	1.08		314	0.96		423	↗	1.38	*	140
062	Sooke	1.00		1,711	↘	0.90	*	751	1.05		525	↘	1.04		306	1.07		140	↘	0.88		75	1.01		70		0.60	*	29
063	Saanich	0.84	*	3,246	↘	0.78	*	799	0.95		978	↘	0.88	*	375	0.76	*	201	↘	0.65	*	83	0.56	*	90		0.74		23
064	Gulf Islands	0.78	*	682	↘	0.86		230	0.87	*	218	↘	0.95		106	0.68	*	45		1.04		24	0.57	*	21		0.71		7
065	Cowichan	1.01		2,294	↘	1.22	*	921	1.09	*	703		1.15	*	368	1.09		185		1.12		106	0.86		81		0.83		29
066	Lake Cowichan	0.99		212		1.28		108	0.95		63		0.87		36	1.50		27		1.50		17	0.55		5		0.24	+	1
067	Ladysmith	1.21	*	1,108		1.33	*	380	1.24	*	321		1.28	*	168	1.36	*	93		1.31		52	1.10		42	↗	1.68		17
068	Nanaimo	1.05	*	4,494	↘	1.16	*	1,677	1.04		1,247	↘	1.10		644	1.09		340		1.12		190	1.30	*	231	↗	1.09		75
069	Qualicum	0.95	*	2,564	↘	1.03		847	1.04		821	↘	1.08		395	0.95		201		1.05		111	0.70	*	81		0.76		27
070	Alberni	1.22	*	1,424	↘	1.56	*	645	1.20	*	412		1.19	*	217	1.34	*	122		1.40		62	1.74	*	85		2.02	*	38
071	Courtenay	0.99		2,565	↘	1.01		981	1.02		770	↘	1.05		401	1.08		217		1.00		114	0.97		105		0.94		36
072	Campbell River	1.16	*	1,531	↘	1.30	*	746	1.13	*	452	↘	1.23	*	276	1.37	*	145		1.39	*	91	1.31	*	72		0.81		22
075	Mission	1.24	*	1,430	↘	1.24	*	616	1.24	*	407		1.21	*	238	1.34	*	114		1.56	*	78	1.45	*	68		0.98		22
076	Agassiz-Harrison	0.93		337	↘	1.47	*	166	0.81	*	86	↘	1.22		57	0.95		27		1.02		20	0.92		14		1.78		6
077	Summerland	0.94		683	↘	0.80	*	165	1.06		209		0.86		76	1.10		55		0.97		23	0.73		22		0.16	+	4
078	Enderby	1.21	*	393		1.29	*	156	1.20		114		1.13		61	1.31		33		1.43		17	0.73		10		0.56		4
080	Kitimat	1.21	*	308	↘	1.15		171	1.16		95		1.21		60	1.45		32		1.31		22	1.80	*	19		1.35		8
081	Fort Nelson	1.47	*	106		1.36		75	1.49	*	33		1.25		26	1.62		9		1.48		7	0.37		1		-		-
083	Central Coast	2.06	*	62		2.94	*	44	0.76		7		1.45		6	-		-		-		-	1.64		2		1.21		1
084	Vancouver Island West	1.04		67		1.65	*	57	1.25		26		1.14		21	2.13	*	12		2.38		10	1.87		5		1.86		4
085	Vancouver Island North	1.62	*	415		1.71	*	278	1.67	*	143		1.53	*	97	2.08	*	48		1.88	*	32	1.88	*	20		2.11		16
087	Stikine	0.87		22		0.94		19	0.47		4		0.46		3	1.27		3		1.89		3	0.94		1		0.84		1
088	Terrace	1.35	*	670		1.51	*	377	1.26	*	196		1.24		127	1.33		55		1.43		41	1.55	*	32		1.29		20
092	Nisga'a	1.88	*	73		2.27	*	44	1.24		15		1.24		8	0.94		3		0.65		1	3.78	*	6		3.31		5
094	Telegraph Creek	1.45		20		3.56	*	15	0.75		3		1.03		3	-		-		-		-	-		-		-		-
161	Vancouver City Centre	1.02		3,149	↘	0.94		1,338	1.02		864	↘	0.97		451	0.91		195	↘	0.82		107	0.85		105		1.05		43
162	Van. Downtown E. Side	1.21	*	2,513	↘	2.27	*	1,580	1.00		559	↘	1.28	*	349	1.17		166	↘	1.67	*	113	0.95		80		1.28		45
163	Vancouver North East	0.86	*	2,893	↘	0.80	*	1,043	0.98		941		0.95		452	0.99		248		0.80	*	112	0.91		127		0.50	*	39
164	Vancouver West Side	0.80	*	3,726	↘	0.57	*	933	0.78	*	948	↘	0.71	*	410	0.54	*	166	↘	0.52	*	78	0.61	*	114		0.42	*	23
165	Vancouver Midtown	0.90	*	2,281	↘	0.94		906	0.86	*	604	↘	0.89		305	0.89		161	↘	0.78		76	0.84		86		0.99		43
166	Vancouver South	0.85	*	4,218	↘	0.72	*	1,212	0.82	*	1,094	↘	0.80	*	497	0.80	*	274		0.66	*	123	0.88		178		0.90		49
201	Surrey	1.01		8,767	↘	1.02		4,169	0.95	*	2,416	↘	0.99		1,451	0.90	*	602	↘	0.95		376	1.27	*	447	↗	1.09		180
202	South Surrey/White Rock	0.92	*	4,290	↘	0.73	*	938	0.94	*	1,147		0.80	*	446	0.86	*	267		0.68	*	112	0.78	*	149		0.72		28
	PROVINCIAL TOTAL	**1.00**		**154,885**	↘	**1.00**		**57,924**	**1.00**		**43,455**	↘	**1.00**		**22,321**	**1.00**		**11,287**	↘	**1.00**		**6,288**	**1.00**		**6,369**	↗	**1.00**		**2,336**

Please refer to footnotes on Table E

		05 Diabetes							06 Circulatory System							07 Ischemic Heart Diseases							08 Cerebrovascular Disease/Stroke						
	Local Health Area	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75
001	Fernie	0.70		9		0.13	+	2	0.97		112	↘	0.92		44	0.83		46	↘	0.75		24	0.60	*	16		0.25	+	2
002	Cranbrook	1.59	*	48		1.58		17	1.14	*	321	↘	0.75		58	1.13		149	↘	0.93		29	0.98		64	↘	0.63		10
003	Kimberley	1.11		14		0.58		3	0.93		112	↘	0.79		25	0.61	*	34	↘	0.71		14	1.04		30		1.11		3
004	Windermere	0.45		5		0.52		1	0.67	*	66		0.71		20	0.59	*	28		0.62		9	0.75		17		0.60		4
005	Creston	1.16		27		1.42		12	1.17	*	260		1.30		56	1.18		122		1.69	*	36	1.03		55		0.35	*	7
006	Kootenay Lake	0.57		3		0.11	+	1	0.69	*	33	↘	0.37	*	8	0.92		21	↘	0.55		6	0.53		6		0.29	+	1
007	Nelson	1.27		36		0.46	*	9	1.29	*	350		1.22		87	1.30	*	165		1.22		46	1.28	*	82		1.40		17
009	Castlegar	1.41		24		1.02		8	1.23	*	199	↘	1.35		57	1.22		92	↘	1.17		29	1.22		47		1.49		11
010	Arrow Lakes	0.81		6		0.75		1	0.78		54	↘	0.75		15	0.77		25	↘	0.80		7	0.74		12	↘	0.76		4
011	Trail	1.27		38		1.16		15	1.25	*	369	↘	1.34		83	1.30	*	177	↘	1.22		38	1.16		83	↘	1.14		15
012	Grand Forks	1.03		16		0.61		3	1.34	*	194	↘	1.26		43	1.43	*	97		1.45		29	1.43	*	49		0.68		6
013	Kettle Valley	0.39		2		0.31	+	1	0.96		42		0.84		13	0.93		20		0.72		6	1.11		11		1.15		4
014	Southern Okanagan	1.17		50		0.65		11	0.91		369	↘	1.17		89	0.86		162	↘	1.11		48	0.78	*	75	↘	1.12		10
015	Penticton	1.09		90		0.92		16	0.93	*	779	↘	1.06		132	0.94		359	↘	1.05		68	0.98		200	↘	0.81		25
016	Keremeos	1.28		13		0.92		4	1.16		109		1.35		27	1.06		47	↘	1.03		11	0.73		16		1.32		5
017	Princeton	1.28		11		0.50		3	1.00		76	↘	0.82		25	0.88		32	↘	0.99		15	1.03		18		0.93		6
018	Golden	1.81		11		0.96		3	1.21		66	↘	1.11		25	1.08		28	↘	1.49		12	1.04		13		1.22		6
019	Revelstoke	1.09		9		1.54		6	1.11		84	↘	1.52		26	0.81		29	↘	1.18		11	1.12		20	↘	1.28		4
020	Salmon Arm	0.92		50		0.99		15	0.94		481	↘	1.00		127	0.90		214	↘	1.03		74	0.89		108		1.00		26
021	Armstrong-Spallumcheen	0.67		9		0.15	+	1	1.01		128	↘	1.05		32	0.86		51	↘	0.91		16	0.83		25	↘	1.52		6
022	Vernon	1.33	*	127	↗	1.38		39	1.13	*	1,037	↘	1.22	*	231	1.01		432	↘	1.15		117	1.11		245	↘	1.23		47
023	Central Okanagan	0.90		225	↗	0.97		74	1.00		2,399	↘	0.94		459	0.93	*	1,034	↘	0.84	*	229	1.00		576	↘	1.18		97
024	Kamloops	1.23	*	150	↗	1.19		66	1.07	*	1,187	↘	1.06		339	1.09	*	570	↘	1.28	*	214	1.01		262	↘	0.83		47
025	100 Mile House	0.89		17		0.46	*	5	1.16	*	188		1.17		68	1.17		92		1.19		42	1.43	*	53		0.87		13
026	North Thompson	0.86		4		0.92		1	1.31		53		1.59		20	1.43		28		1.51		11	1.08		10		1.31		4
027	Cariboo-Chilcotin	1.97	*	47	↗	2.18	*	21	1.22	*	254	↘	1.15		88	1.11		111	↘	1.17		50	1.20		57	↘	1.40		15
028	Quesnel	1.46	*	35		1.30		16	1.17	*	249	↘	1.18		75	0.99		100	↘	1.14		39	1.24		61		0.84		12
029	Lillooet	1.29		6		0.89		2	1.31		55		1.77		25	1.35		27		1.42		12	0.82		8		2.03		4
030	South Cariboo	1.45		14		1.97		8	1.02		86	↘	1.79	*	37	1.11		45	↘	1.97	*	24	0.88		17	↘	1.92		6
031	Merritt	0.89		12		1.20		5	1.57	*	194		2.00	*	75	1.71	*	100	↘	2.22	*	44	1.56	*	45		1.28		14
032	Hope	2.11	*	26		2.53		9	1.19		134	↘	1.78	*	53	1.33	*	71	↘	1.69		28	0.83		22		1.08		6
033	Chilliwack	0.95		97		1.32		40	1.10	*	1,071	↘	1.31	*	269	1.21	*	547	↘	1.48	*	160	0.95		222	↘	1.35		47
034	Abbotsford	1.24	*	182	↗	1.13		64	1.10	*	1,582	↘	0.93		312	1.16	*	772	↘	1.06		181	0.98		339	↘	1.06		69
035	Langley	0.93		126		0.84		42	1.09	*	1,443	↘	1.06		332	1.24	*	755	↘	1.29	*	213	1.03		328	↘	0.77		44
037	Delta	0.72	*	77		0.70		31	1.03		1,020	↘	0.79	*	191	1.03		480	↘	0.85		109	1.13	*	266	↘	0.63	*	33
038	Richmond	0.80	*	157		0.69	*	59	0.73	*	1,362	↘	0.59	*	278	0.76	*	657	↘	0.54	*	144	0.83	*	370	↘	0.66	*	61
040	New Westminster	0.90		63		1.45		27	1.26	*	886	↘	1.26	*	193	1.49	*	477		1.27		112	1.04		177	↘	1.47		35
041	Burnaby	0.97		230		0.99		77	0.98		2,258	↘	0.82	*	452	1.15	*	1,219	↘	0.84	*	243	0.93		512	↘	1.05		103
042	Maple Ridge	1.12		90		1.24		42	1.16	*	870	↘	1.15		241	1.23	*	431	↘	1.31	*	129	1.16	*	206	↘	1.07		53
043	Coquitlam	0.80	*	132		0.58	*	48	0.90	*	1,362	↘	0.81	*	353	0.93		658	↘	0.79	*	195	0.90		317	↘	0.77		63
044	North Vancouver	0.91		134		0.84		41	0.99		1,405	↘	0.75	*	258	0.92	*	605	↘	0.61	*	131	1.18	*	400	↘	0.81		54
045	West Vancouver-Bowen Is	0.52	*	48		0.20	*	8	0.92	*	865	↘	0.51	*	95	0.84	*	362	↘	0.44	*	46	1.16	*	267	↘	0.63	*	23
046	Sunshine Coast	0.71	*	33		0.99		13	1.00		437	↘	1.05		108	0.89		183	↘	1.21		61	1.16		121		0.58	*	16
047	Powell River	1.09		33		0.24	*	7	1.04		299	↘	1.25		81	1.00		134	↘	1.33		46	0.94		64	↘	0.60		8
048	Howe Sound	1.13		20		0.74		11	1.02		156	↘	1.26		73	1.05		77	↘	1.47		42	1.21		41		1.42		15
049	Bella Coola Valley	1.13		3		2.08		2	1.43		33	↘	2.71	*	17	1.88	*	21		2.75		10	0.94		5		1.42		3
050	Queen Charlotte	1.30		5		0.82		2	1.14		38	↘	1.66		18	1.18		19		2.02		13	0.93		7	↘	1.14		2
051	Snow Country	-		-		-		-	1.67		5		1.32		3	0.64		1		0.22	+	1	1.65		1		6.33		1
052	Prince Rupert	2.16	*	26	↗	1.94		13	1.19		127	↘	1.87	*	60	1.10		56	↘	1.31		29	1.14		28		3.27	*	12
053	Upper Skeena	2.27	*	9		2.51		4	0.97		32	↘	1.12		18	1.24		20		1.13		11	0.67		5	↘	1.15		2
054	Smithers	1.38		17		1.51		8	1.01		109	↘	0.76		31	0.87		45	↘	1.02		18	0.89		22		0.47	*	5
055	Burns Lake	2.27	*	17	↗	1.65		5	1.08		72	↘	1.32		25	1.35		43		1.50		15	0.98		15		1.83		6
056	Nechako	1.53		19		1.73		10	1.40	*	148	↘	1.31		47	1.05		54		1.41		26	2.00	*	48		0.96		9
057	Prince George	1.56	*	112		1.76	*	63	1.17	*	724	↘	1.11		283	1.09		325	↘	1.08		141	1.21	*	170	↘	1.23		61
059	Peace River South	2.16	*	48	↗	1.69		17	1.19	*	230	↘	0.99		76	1.27	*	118		1.23		48	0.95		42		0.59		12
060	Peace River North	1.12		21		1.01		10	0.98		162	↘	1.11		60	0.98		77	↘	1.12		29	0.94		35		0.75		13
061	Greater Victoria	0.93		317	↗	1.25		92	1.04	*	3,742	↘	1.08		549	0.98		1,589	↘	0.95		277	0.99		880	↘	1.21		107
062	Sooke	0.90		49		0.52	*	22	1.03		509	↘	1.00		152	1.03		240	↘	0.99		83	1.01		116		0.88		24
063	Saanich	0.56	*	72		0.51	*	17	0.77	*	989	↘	0.60	*	136	0.69	*	408	↘	0.62	*	70	0.86	*	269	↘	0.75		30
064	Gulf Islands	0.48	*	14		0.97		6	0.77	*	217	↘	0.66	*	43	0.63	*	83	↘	0.74		22	0.76	*	51	↘	0.09	+	4
065	Cowichan	0.91		68		0.84		23	0.98		698	↘	1.08		157	0.96		318	↘	0.91		66	0.93		157	↘	1.06		28
066	Lake Cowichan	0.70		5		0.36		1	1.19		74		1.49		28	1.10		33		1.32		12	1.39		20		2.29		9
067	Ladysmith	1.08		33		1.37		14	1.15	*	337	↘	1.03		74	1.07		146	↘	0.82		34	1.20		84		1.01		15
068	Nanaimo	1.37	*	192	↗	1.27		65	1.05	*	1,427	↘	1.16		321	1.09	*	683	↘	1.14		179	0.97		313	↘	0.98		51
069	Qualicum	0.71	*	66		0.82		23	0.91	*	791	↘	0.79	*	148	0.91		371	↘	0.88		90	0.86	*	178	↘	0.78		21
070	Alberni	1.65	*	64		1.49		26	1.11	*	396	↘	1.48	*	121	1.22	*	206	↘	1.43	*	70	1.02		86	↘	1.87		25
071	Courtenay	1.00		86		1.12		29	0.96		770	↘	0.97		205	0.87	*	329	↘	0.95		112	1.15	*	220	↘	1.01		39
072	Campbell River	1.29		56		0.56	*	15	1.19	*	460	↘	1.15		146	1.02		188	↘	0.89		60	1.27	*	114		1.49		35
075	Mission	1.53	*	56		1.41		21	1.23	*	422	↘	1.21		106	1.24	*	201	↘	1.10		52	1.04		84		1.18		18
076	Agassiz-Harrison	1.07		13		2.70		6	0.89		99	↘	1.12		33	0.93		49	↘	1.06		18	0.96		25	↘	1.33		7
077	Summerland	0.75		18		0.19	+	3	0.86	*	209	↘	0.79		30	0.81	*	91	↘	0.71		16	0.96		57		0.46	*	5
078	Enderby	0.55		6		0.48		2	1.26	*	127	↘	0.91		26	1.19		57	↘	0.83		15	1.40		33		0.88		4
080	Kitimat	2.05	*	17	↗	1.95		7	1.23		83		1.31		34	1.27		42		1.34		21	1.13		17		0.35	+	4
081	Fort Nelson	0.50		1		-		-	1.90	*	29		1.43		13	1.67		13		1.70		8	1.31		4		0.31	+	1
083	Central Coast	2.12		2		2.09		1	1.99	*	16		2.11		7	2.29	*	9		2.63		5	3.37	*	6		4.53		2
084	Vancouver Island West	1.91		4		1.90		3	0.68		12		1.36		9	0.57		5		1.41		5	0.26		1		0.80		1
085	Vancouver Island North	1.58		13		2.32		11	1.38	*	89	↘	1.71	*	48	1.27		41	↘	1.84	*	25	1.57		22		2.11		12
087	Stikine	1.19		1		1.26		1	0.77		5		0.39	+	4	1.23		4		0.61		3	0.70		1		0.39		1
088	Terrace	1.73	*	28		1.61		17	1.48	*	202		1.48	*	75	1.60	*	106		2.05	*	53	1.26		39		1.03		9
092	Nisga'a	4.06	*	5		3.47		4	2.46	*	25		2.60		11	2.00		10		2.08		5	2.69		6		5.98		4
094	Telegraph Creek	-		-		-		-	0.78		3		0.15	+	1	0.54		1		0.29	+	1	1.17		1		-		-
161	Vancouver City Centre	0.82		79		1.16		33	0.93	*	859	↘	1.04		256	0.92		393	↘	1.10		144	1.01		222		0.95		43
162	Van. Downtown E. Side	0.89		59		1.30		35	1.02		666	↘	2.45	*	306	1.02		307	↘	1.99	*	149	0.94		146	↘	2.27	*	52
163	Vancouver North East	0.91		100		0.49	*	29	0.80	*	819	↘	0.80	*	190	0.70	*	334	↘	0.64	*	83	0.95		232	↘	0.94		48
164	Vancouver West Side	0.50	*	73		0.38	*	15	0.79	*	1,171	↘	0.52	*	164	0.71	*	478	↘	0.48	*	75	0.87	*	314	↘	0.42	*	29
165	Vancouver Midtown	0.80		64		1.06		30	0.90	*	689	↘	1.07		180	0.80	*	282	↘	0.90		88	1.16	*	210	↘	1.15		39
166	Vancouver South	0.94		149		1.02		41	0.86	*	1,362	↘	0.72	*	241	0.83	*	602	↘	0.61	*	110	0.95		364	↘	0.99		63
201	Surrey	1.36	*	374	↗	1.25		146	1.06	*	2,598	↘	1.13	*	833	1.14	*	1,325	↘	1.27	*	499	0.96		550	↘	1.15		145
202	South Surrey/White Rock	0.66	*	100		0.44	*	17	0.95	*	1,492	↘	0.64	*	169	1.07		765	↘	0.66	*	90	0.92		352	↘	0.52	*	35
	PROVINCIAL TOTAL	**1.00**		**5,018**	↗	**1.00**		**1,777**	**1.00**		**48,129**	↘	**1.00**		**11,156**	**1.00**		**22,355**	↘	**1.00**		**6,035**	**1.00**		**11,486**	↘	**1.00**		**2,097**

Please refer to footnotes on Table E

		09 Arteries/Arterioles/Capillaries							10 Respiratory System							11 Pneumonia and Influenza							12 Chronic Lung Disease						
	Local Health Area	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75
001	Fernie	1.59		10		1.53		4	1.24		49		1.11		20	0.86		13		0.51		2	1.65	*	27		1.64		14
002	Cranbrook	1.40		21		0.84		7	1.26	*	123		1.23		34	0.77		29		0.64		7	1.73	*	70		1.63		16
003	Kimberley	1.26		8		0.27	+	2	1.10		46		1.20		13	0.55		9		-		-	1.51		26		2.80		11
004	Windermere	0.55		3	↘	0.96		2	0.93		32		0.66		8	0.31	+	4		-		-	1.37		20		0.67		4
005	Creston	1.02		12		0.36	+	2	1.06		83		2.01	*	27	0.88		27		2.26		6	1.14		37		1.94		14
006	Kootenay Lake	0.77		2		-		-	0.54		9		0.38	+	3	0.47		3		0.62		2	0.57		4		0.42		1
007	Nelson	1.82	*	26		3.06		10	0.84		79		1.03		24	0.43	*	16	↘	0.74		5	1.26		48		0.96		13
009	Castlegar	2.10	*	18		1.95		7	1.09		61		1.63		20	0.77		17		1.36		6	1.48	*	34		1.43		10
010	Arrow Lakes	0.81		3		-		-	0.79		19	↘	0.38	+	3	0.76		7	↘	-		-	1.10		11	↘	0.86		2
011	Trail	0.85		13		2.45		5	1.08		111		1.89		25	0.75		31		1.88		7	1.50	*	62		1.49		13
012	Grand Forks	1.54		12		3.55		4	0.92		47		1.17		10	1.24		24		1.23		4	0.79		17		0.77		3
013	Kettle Valley	0.81		2		3.11		2	0.71		11		0.74		4	0.18		1		0.46		1	1.33		9		1.49		3
014	Southern Okanagan	1.07		23		1.37		10	0.92		132		0.99		27	0.97		53		0.64		8	0.89		54		1.10		12
015	Penticton	0.95		41		1.47		9	1.08		318		1.36		54	1.24	*	147		1.84		22	0.97		115		1.11		24
016	Keremeos	1.77		9		0.97		3	1.09		36		1.50		11	0.97		12		-		-	1.27		18		2.23		8
017	Princeton	0.71		3	↘	0.72		2	1.50	*	40		2.10		13	2.06	*	20		4.03		4	1.12		13		1.71		7
018	Golden	3.05	*	9	↗	0.94		3	1.12		21		0.29	*	6	1.67		12		0.36	+	2	1.03		8		0.46	+	4
019	Revelstoke	1.72		7		4.57		4	1.07		28		0.76		6	1.29		13		1.20		3	0.92		10		0.86		3
020	Salmon Arm	1.14		31		1.07		11	0.89		160		0.58	*	30	0.73	*	50		0.27	*	5	1.14		85		0.85		19
021	Armstrong-Spallumcheen	1.33		9		0.13	+	1	0.83		37	↘	0.74		8	0.63		11		0.87		3	1.14		21		1.14		5
022	Vernon	1.34	*	65	↘	0.71		15	1.07		344		1.09		80	1.00		127		1.10		21	1.21	*	160		1.16		42
023	Central Okanagan	1.08		137		0.84		31	0.92	*	774	↘	0.99		145	0.85	*	283	↘	1.13		38	1.03		358		0.98		74
024	Kamloops	1.20		72	↘	1.10		20	1.00		386	↘	1.18		124	0.75	*	110	↘	1.30		29	1.27	*	207	↘	1.29		74
025	100 Mile House	0.99		9		0.68		2	1.30	*	73		1.65		28	1.29		26		2.35		7	1.46	*	36		1.90		18
026	North Thompson	2.22		5		5.16		2	1.71	*	24		2.97	*	16	1.54		8		4.32		5	2.00	*	12		2.82		8
027	Cariboo-Chilcotin	1.31		15		0.58		4	0.95		68	↘	0.97		24	0.64		17		0.88		5	1.25		38	↘	1.28		14
028	Quesnel	1.63		19		3.09		10	1.06		78	↘	0.98		20	0.83		23		0.54		4	1.44	*	45		1.78		13
029	Lillooet	3.06	*	7		1.40		3	1.79	*	26		1.48		9	1.99		11		0.43	+	3	1.64		10		2.20		4
030	South Cariboo	1.07		5		0.59		2	1.29		38		2.36		11	0.94		10		4.66		4	1.73	*	22		1.45		5
031	Merritt	1.20		8		2.00		5	1.37	*	59		1.54		19	1.03		17		1.15		5	1.78	*	32		1.55		9
032	Hope	0.98		6	↘	3.13		5	1.59	*	63		1.93		18	1.21		18		2.04		5	2.21	*	37		2.82	*	12
033	Chilliwack	0.99		51	↘	0.92		15	1.40	*	478	↗	1.53	*	119	1.56	*	208		1.67		38	1.33	*	189	↗	1.66	*	58
034	Abbotsford	0.92		69	↘	0.60		13	1.12	*	563		1.21		121	1.39	*	282		1.12		37	1.01		206		1.32		61
035	Langley	0.96		66	↘	0.87		20	1.21	*	553		0.86		109	1.27	*	235		0.82		26	1.24	*	229		1.16		60
037	Delta	0.74		39	↘	0.22	*	9	0.95		326		0.81		61	1.18	*	159		0.92		21	0.75	*	107		0.77		27
038	Richmond	0.52	*	51		0.56	*	14	0.81	*	527	↘	0.42	*	90	0.79	*	202	↘	0.19	*	19	0.72	*	190	↘	0.43	*	40
040	New Westminster	1.14		41		1.65		13	1.10		266	↘	1.22		54	0.90		89	↘	1.20		15	1.16		110		1.41		27
041	Burnaby	0.57	*	69	↘	0.63	*	19	1.14	*	911		0.56	*	134	1.21	*	368		0.37	*	28	1.07		345		0.78		70
042	Maple Ridge	0.91		36		1.18		12	1.15	*	298		1.06		78	1.02		104		1.05		22	1.20		127		1.30		40
043	Coquitlam	0.79		64	↘	0.93		22	0.95		494	↘	0.66	*	113	1.04		209	↘	0.56	*	31	0.84	*	179	↘	0.59	*	50
044	North Vancouver	0.80		59	↘	0.53	*	13	0.91		448	↘	0.49	*	66	1.02		199	↘	0.59	*	18	0.77	*	153	↘	0.35	*	27
045	West Vancouver-Bowen Is.	0.98		47		0.44	*	5	0.89	*	291		0.50	*	33	1.28	*	172		0.70		13	0.52	*	68	↘	0.35	*	13
046	Sunshine Coast	1.16		27		1.35		11	0.80	*	123		0.64	*	24	1.01		60		0.93		11	0.59	*	38	↘	0.61		10
047	Powell River	1.25		19		1.32		6	1.01		101		1.31		23	0.75		29		1.21		5	1.31		54		1.23		12
048	Howe Sound	0.59		5	↘	0.39	+	4	0.91		47		1.00		20	1.06		21		1.59		11	0.99		21		0.81		5
049	Bella Coola Valley	0.78		1		2.20		1	0.87		7		1.01		4	1.01		3		1.71		2	1.17		4		1.00		2
050	Queen Charlotte	0.55		1		2.34		1	1.76	*	20		2.91		9	1.17		5		2.72		1	2.54	*	12		4.06		6
051	Snow Country	5.48		1		-		-	0.96		1		-		-	-		-		-		-	2.15		1		-		-
052	Prince Rupert	1.38		8		1.67		4	1.07		39		0.75		8	0.72		10		0.90		2	1.24		19		0.11	+	2
053	Upper Skeena	0.53		1		0.27	+	1	1.31		15		0.81		4	1.20		5		-		-	0.61		3		-		-
054	Smithers	1.01		6		0.87		2	1.05		39		0.77		12	0.72		10		0.33	+	2	1.35		21		1.01		7
055	Burns Lake	0.27		1		-		-	1.03		24		1.20		7	0.69		6		0.67		2	1.33		13		0.77		2
056	Nechako	1.35		8		0.28	+	1	1.84	*	68		2.95	*	28	1.70	*	23		0.83		5	2.40	*	38	↗	5.67	*	18
057	Prince George	1.75	*	60		2.01	*	33	1.16	*	247	↘	1.23		99	0.88		70	↘	1.01		23	1.33	*	119		1.29		47
059	Peace River South	1.03		11		1.45		4	1.06		71	↘	1.12		23	0.85		21		0.87		5	1.26		36		0.94		13
060	Peace River North	1.00		9		1.66		6	1.34	*	76		0.74		23	1.20		26		0.40	*	5	1.71	*	40		1.60		16
061	Greater Victoria	1.00		181	↘	1.21		41	0.86	*	1,070	↘	0.95		169	0.69	*	362	↘	0.74		38	1.00		481	↘	1.00		86
062	Sooke	0.90		24	↘	1.13		8	0.90		153		1.17		48	0.80		53		1.65		22	0.98		69		0.64		17
063	Saanich	0.74	*	49	↘	0.46	*	8	0.82	*	372	↘	0.85		54	0.75	*	136	↘	0.85		10	0.81	*	147	↘	0.60	*	21
064	Gulf Islands	1.21		18		0.80		5	0.68	*	67	↘	0.66		15	0.72		28		0.22	+	4	0.54	*	22	↘	1.17		8
065	Cowichan	1.46	*	55		1.82		19	0.94		235	↘	1.30		60	0.91		88	↘	1.60		19	0.98		101		1.05		25
066	Lake Cowichan	0.87		3		1.26		1	1.02		22		1.40		7	2.02	*	16	↗	3.51		6	0.32	+	3	↘	0.30	+	1
067	Ladysmith	1.56		24		1.26		9	1.19		122		1.12		20	1.23		49		0.71		5	1.07		45		0.81		12
068	Nanaimo	1.00		71	↘	1.04		22	0.95		447	↘	1.32	*	126	0.79	*	148		1.18		28	1.04		201		1.31		65
069	Qualicum	0.92		43	↘	1.05		14	0.90		275		0.75		43	1.03		120		0.54		8	0.84		109		0.70		23
070	Alberni	0.99		19	↘	0.45	+	4	0.99		123		1.10		40	0.76		36		1.28		12	1.26		65		1.06		23
071	Courtenay	1.16		50		1.34		18	0.90		253	↘	0.85		60	0.65	*	70	↘	0.51	*	9	1.10		129		1.12		33
072	Campbell River	1.56	*	33		1.61		16	0.93		125		1.24		42	0.75		38		1.32		10	1.01		57		1.06		19
075	Mission	1.31		24		1.99		6	1.39	*	166		1.29		41	1.04		49	↘	0.78		10	1.95	*	95		1.45		23
076	Agassiz-Harrison	0.66		4		1.64		2	0.92		36		1.03		13	0.67		10		-		-	1.03		17		1.93		9
077	Summerland	0.95		12		0.20	+	2	0.70	*	60	↘	0.76		13	0.55	*	19	↘	0.78		4	0.84		29		0.61		6
078	Enderby	1.10		6		0.76		1	0.95		34		2.75		12	0.66		9		4.65		4	1.20		18		1.77		6
080	Kitimat	1.30		5		1.55		3	1.21		28		0.85		10	1.11		9		0.42		1	0.98		10		0.65		5
081	Fort Nelson	4.46	+	4		3.17		1	1.37		7		0.32	+	2	1.08		2		0.56		1	2.38		5		0.22	+	1
083	Central Coast	-		-		-		-	3.18	*	9		10.05		7	4.76	*	5		15.95		4	1.68		2		1.93		1
084	Vancouver Island West	3.00		3		1.72		2	0.84		5		2.74		5	0.46		1		3.11		1	1.18		3		2.70		3
085	Vancouver Island North	0.53		2		1.00		2	1.70	*	37		2.26		17	1.45		11		2.33		5	2.01	*	19		1.73		7
087	Stikine	-		-		-		-	0.45		1		0.64		1	-		-		-		-	1.02		1		1.79		1
088	Terrace	0.52		4		1.08		2	1.30		62		1.69		25	1.45		25		1.86		7	1.03		21		1.33		10
092	Nisga'a	-		-		-		-	1.73		6		1.56		3	-		-		-		-	3.38	*	5		5.10		3
094	Telegraph Creek	-		-		-		-	0.75		1		6.63		1	1.92		1		15.58		1	-		-		-		-
161	Vancouver City Centre	1.20		58		1.02		19	1.13	*	359	↘	1.09		77	1.26	*	162	↘	1.15		29	0.99		124	↘	1.10		29
162	Van. Downtown E. Side	1.01		34		2.37	*	24	1.34	*	298	↘	4.82	*	162	1.33	*	120		6.27	*	72	1.35	*	120	↘	4.73	*	64
163	Vancouver North East	0.71	*	39		0.95		9	0.81	*	293	↘	0.76		64	0.79	*	110	↘	0.42	*	16	0.67	*	100	↘	0.58	*	20
164	Vancouver West Side	0.68	*	51	↘	0.44	*	12	1.05		540	↘	0.54	*	49	1.36	*	289	↘	0.83		26	0.61	*	122	↘	0.28	*	11
165	Vancouver Midtown	1.00		40		0.91		12	0.90		240	↘	0.80		47	0.96		101	↘	0.74		11	0.78	*	84	↘	0.77		19
166	Vancouver South	0.87		71	↘	0.65		13	0.91	*	498	↘	0.69	*	76	1.07		238		0.73		22	0.60	*	132	↘	0.47	*	30
201	Surrey	1.24	*	166	↘	0.80		40	1.03		882	↘	0.95		257	1.22	*	397		1.10		101	0.98		347	↘	0.75	*	100
202	South Surrey/White Rock	0.98		78		0.62		10	0.91	*	498		0.59	*	53	1.03		231		0.55	*	15	0.77	*	167		0.50	*	25
	PROVINCIAL TOTAL	**1.00**		**2,531**	↘	**1.00**		**741**	**1.00**		**16,735**	↘	**1.00**		**3,724**	**1.00**		**6,620**	↘	**1.00**		**1,060**	**1.00**		**6,819**	↘	**1.00**		**1,701**

Please refer to footnotes on Table E

		13 Digestive System							14 Motor Vehicle Accidents							15 Unintentional Falls							16 Suicide						
	Local Health Area	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75
001	Fernie	1.20		21		1.09		9	2.64	•	16		2.30		12	1.36		6		0.16	+	2	1.18		9		1.20		9
002	Cranbrook	0.83		32		0.67		18	1.54		16	↗	2.03		16	1.54		16		0.96		5	1.42		18		1.21		15
003	Kimberley	0.70		11		0.26	+	4	2.29		8		2.53		6	2.74	•	12		0.15	+	1	1.81		8		1.46		7
004	Windermere	0.99		14		0.83		8	1.93		8		1.41		6	1.37		5		0.12	+	1	0.77		4		0.67		4
005	Creston	1.04		29		1.03		11	1.36		7		0.79		4	1.25		10		4.83		5	1.43		9		1.66		8
006	Kootenay Lake	1.04		7		0.82		3	1.96		3		2.76		3	3.98	•	7		6.66		3	2.48		5		1.73		4
007	Nelson	0.81		30		0.60		9	1.17		12	↘	1.12		12	1.68		17		2.13		4	1.03		13		0.88		11
009	Castlegar	1.85	•	40		0.61		12	1.99		11		2.10		9	1.84		11		2.19		3	0.89		6		0.95		6
010	Arrow Lakes	1.07		10		0.47		3	0.52		1		0.56		1	1.60		4		-		-	1.19		3		1.13		3
011	Trail	1.44	•	54		1.65		28	1.59		13		1.35		8	1.20		13		1.05		6	0.90		9		1.06		9
012	Grand Forks	1.38		26		1.48		12	3.44	•	13		4.11	•	13	2.10	•	11		2.38		3	1.27		6		0.92		4
013	Kettle Valley	0.16	+	1	↘	-		-	1.38		2		0.67		2	0.63		1		-		-	2.51		5		1.62		4
014	Southern Okanagan	1.15		58		1.76		26	1.90	•	16		2.17		14	1.38		20		1.00		5	1.15		12		1.25		8
015	Penticton	1.19		119		1.59	•	44	1.21		22		1.48		17	1.15		35		1.88		6	1.21		26		1.61		26
016	Keremeos	1.49		18		1.14		5	6.18	•	13		8.69	•	12	0.90		3		-		-	0.37		1		0.52		1
017	Princeton	1.44		15		1.40		6	3.34	•	7		4.50		7	1.11		3		-		-	0.72		2		0.66		1
018	Golden	0.74		6		0.54		2	1.32		4		1.95		4	0.48		1		-		-	0.80		3		0.86		3
019	Revelstoke	1.30		14		0.42	•	6	0.90		3		0.96		3	0.35		1	↘	-		-	0.73		3		0.87		3
020	Salmon Arm	1.21		81		1.30		36	2.39	•	34		2.79	•	30	1.24		23		1.23		3	1.19		21		1.72		19
021	Armstrong-Spallumcheen	0.71		12		0.72		3	3.04	•	12		4.36	•	12	1.07		5		0.13	+	1	1.24		6		1.25		5
022	Vernon	0.82	•	97	↘	1.00		39	1.30		35	↘	1.20		26	0.83		28		0.87		7	1.23		40		1.29		38
023	Central Okanagan	0.94		292		1.13		121	1.04		78		1.03		66	1.14		101		0.98		21	0.99		89	↘	1.06		82
024	Kamloops	1.24	•	192		1.32		92	1.74	•	79	↘	1.56	•	75	1.08		44		0.78		13	1.02		56	↘	0.98		55
025	100 Mile House	1.34		32		1.70		19	3.32	•	20		3.74	•	18	0.68		4		0.48		2	1.28		10		1.26		9
026	North Thompson	2.64	•	16		0.66		3	2.92		5		3.26		4	1.33		2		-		-	1.82		4		2.47		4
027	Cariboo-Chilcotin	1.52	•	48		1.64		30	3.21	•	35		3.53	•	34	1.67		13		0.84		2	1.87	•	25		2.13	•	25
028	Quesnel	1.45	•	45		1.97		25	1.89	•	18		2.12	•	17	0.76		6	↘	0.59		3	1.10		13		1.20		11
029	Lillooet	2.32	•	14		1.29		6	0.56		1		1.13		1	1.28		2		0.36		1	0.45		1		0.56		1
030	South Cariboo	2.17	•	26		3.15	•	19	2.67	•	8		2.44		6	1.32		4		1.18		1	0.53		2		0.79		2
031	Merritt	1.86	•	32		4.15	•	26	2.98	•	14		3.27	•	13	2.63	•	12		2.29		5	1.38		8		1.15		6
032	Hope	1.66	•	25		2.32		16	2.36	•	8		2.18		6	1.97		8		2.17		2	1.64		7		1.65		5
033	Chilliwack	1.13		144		1.26		69	0.90		30	↘	0.80		24	0.81		29		1.45		9	1.14		45	↘	1.10		42
034	Abbotsford	0.86		160		0.89		75	1.22		68		1.26		60	0.81		44		0.89		10	0.89		57	↘	0.93		55
035	Langley	1.00		175		0.74	•	57	1.15		60		1.10		51	1.01		50		0.43	•	9	0.91		56		0.76		49
037	Delta	1.04		144		0.84		56	0.67	•	28		0.64	•	25	0.48	•	18		0.57		5	0.52	•	26	↘	0.46	•	23
038	Richmond	0.72	•	184	↘	0.55	•	63	0.45	•	36	↘	0.43	•	26	0.48	•	34	↘	0.34	•	8	0.65	•	62		0.56	•	55
040	New Westminster	1.15		106		1.00		48	0.86		23		0.90		23	1.10		29		0.55		7	1.09		36	↘	1.05		35
041	Burnaby	0.94		286	↘	0.79	•	104	0.46	•	43	↘	0.44	•	39	0.91		79		0.66		17	0.75	•	84	↘	0.65	•	74
042	Maple Ridge	1.18		125		0.90		58	1.18		43		1.32		39	0.85		24		1.04		7	1.08		48		1.02		47
043	Coquitlam	0.89		201		0.65	•	89	0.81		71		0.79		65	0.69	•	40	↘	0.56	•	13	0.72	•	76	↘	0.66	•	71
044	North Vancouver	0.82	•	157	↘	0.57	•	53	0.42	•	24	↘	0.40	•	22	0.77		41	↘	1.19		12	0.71	•	49		0.70	•	43
045	West Vancouver-Bowen Is	0.86		99		0.36	•	16	0.41	•	9		0.55	•	8	0.58	•	20	↘	0.13	+	3	0.88		23		0.69		18
046	Sunshine Coast	0.92		53		0.95		24	1.50		18		1.76		15	1.25		20		1.89		4	0.72		11	↘	0.70		11
047	Powell River	1.13		43		1.06		20	1.45		12		2.08		12	0.67		7		0.06	+	1	1.45		15		1.22		13
048	Howe Sound	1.37		35		1.57		25	1.73	•	24	↘	1.70		23	2.10	•	13		5.35	•	10	1.24		21		1.20		20
049	Bella Coola Valley	1.71		6		2.05		5	2.57		3		3.52		3	-		-		-		-	2.74		4		3.43		4
050	Queen Charlotte	1.71		9		2.39		6	1.04		2		0.51		1	2.36		3		0.75		1	1.64		4		2.08		4
051	Snow Country	1.79		1		3.38		1	4.91		1		7.68		1	-		-		-		-	3.53		1		7.24		1
052	Prince Rupert	1.73	•	28		1.94		18	0.34		2		0.15	+	2	1.24		5	↘	3.25		3	1.56		11		1.97		11
053	Upper Skeena	1.33		7		1.07		4	1.87		4		0.73		2	1.59		2		0.72		1	1.57		4		2.66		4
054	Smithers	1.08		18		0.64		9	1.87		12		2.19		12	3.88	•	16	↗	3.66		8	1.29		10		1.50		9
055	Burns Lake	1.76	•	17		2.39		11	3.41	•	11		4.56	•	11	1.60		4		-		-	1.29		5		1.01		5
056	Nechako	2.03	•	33		2.92	•	24	3.49	•	21		3.56	•	19	1.74		7		0.60		1	1.37		10		1.11		7
057	Prince George	1.10		107		0.84		53	1.40	•	55	↘	1.27		52	1.47	•	35		1.16		11	1.24		59		1.33		56
059	Peace River South	0.88		26		1.06		15	2.21	•	24		2.35	•	23	1.23		9		0.86		2	1.07		14		1.04		13
060	Peace River North	0.91		24		1.01		17	3.31	•	45		3.64	•	43	0.46		3		0.48		2	1.08		17		1.18		16
061	Greater Victoria	0.95		413		1.17		151	0.40	•	39		0.38	•	32	1.36	•	183	↘	1.02		35	1.14		131	↘	1.11		112
062	Sooke	1.05		77		0.63	•	32	0.86		22		0.75		19	1.01		19		0.68		6	0.84		27		0.97		24
063	Saanich	0.80	•	124		0.71		37	0.71		20		0.91		17	1.15		54		1.40		9	0.68		23		0.83		19
064	Gulf Islands	0.96		35	↗	1.18		11	0.92		6		0.56		3	0.59		6		-		-	0.60		5		0.56		4
065	Cowichan	1.12		105		1.65	•	59	1.20		28		1.48		25	0.69		18	↘	0.95		7	1.35		38		1.54		34
066	Lake Cowichan	1.31		12		1.75		8	0.77		2		0.85		2	0.87		2		-		-	0.91		3		1.44		3
067	Ladysmith	1.22		46		1.60		20	1.18		9		1.30		6	1.32		14		1.26		4	1.26		12		1.79		11
068	Nanaimo	1.02		179	↗	1.18		87	0.93		40		1.14		36	0.98		49	↘	1.40		11	1.28		66	↘	1.25		54
069	Qualicum	0.94		104		1.06		42	1.41		27		1.99	•	20	1.26		39	↘	0.28	+	4	0.91		22		0.94		16
070	Alberni	1.18		58		1.65	•	36	2.14	•	28		2.15	•	23	1.44		19		0.99		5	1.85	•	30		1.77	•	27
071	Courtenay	1.09		118		1.03		49	0.97		25		1.05		21	1.12		33		0.81		8	1.25		40		1.30		37
072	Campbell River	1.15		65		1.16		36	1.73	•	29		1.45		24	1.25		18		2.02		6	1.85	•	39		2.13	•	36
075	Mission	1.32	•	64		1.64	•	41	1.41		24		1.55		24	1.07		14		1.50		8	0.73		15		0.77		14
076	Agassiz-Harrison	1.14		17		0.74		5	1.64		6		2.86		6	1.23		5		0.15	+	1	1.34		6		2.09		6
077	Summerland	0.92		27		0.40	+	4	0.80		4		1.22		3	1.13		10		-		-	1.16		7		1.89		7
078	Enderby	1.72	•	23		1.85		11	2.53	•	8		3.32		7	0.82		3		-		-	1.80		7		2.05		6
080	Kitimat	1.52		17		1.60		13	1.40		6		0.95		6	1.18		3		1.96		3	1.11		6		1.38		6
081	Fort Nelson	1.23		4		0.60		3	4.37	•	11		5.06	•	11	-		-		-		-	0.33		1		0.22	+	1
083	Central Coast	6.25	•	8		5.26		6	-		-		-		-	3.17		1		7.99		1	5.73	+	4		6.57		4
084	Vancouver Island West	0.69		2		1.19		2	3.16		3		1.47		3	-		-		-		-	3.14		4		5.13		4
085	Vancouver Island North	2.23	•	26		1.75		19	1.83		9		1.87		9	2.81	•	7		7.80		6	1.92		12		2.26		12
087	Stikine	3.51		4		3.54		3	-		-		-		-	-		-		-		-	3.74		2		1.80		2
088	Terrace	1.31		28		1.43		21	2.12	•	17		1.74		16	1.35		7		0.32	+	1	1.33		13		1.69		12
092	Nisga'a	1.77		3		1.32		2	-		-		-		-	-		-		-		-	7.61	•	7		12.90	•	7
094	Telegraph Creek	3.46		2		0.43		1	3.54		1		5.41		1	6.60		1		44.64		1	6.22		2		8.98		2
161	Vancouver City Centre	0.88		114	↘	0.79		54	0.34	•	18		0.22	•	14	0.72		26	↘	0.98		11	1.40	•	93	↘	1.28		90
162	Van. Downtown E. Side	1.46	•	126	↘	2.59	•	90	0.74		20	↘	0.46	•	14	1.18		29	↘	2.91	•	20	1.91	•	67	↘	2.03	•	64
163	Vancouver North East	0.83		116	↘	0.53	•	41	0.50	•	22	↘	0.37	•	16	0.81		31		0.32	•	5	0.69	•	36		0.67	•	31
164	Vancouver West Side	0.73	•	139	↘	0.40	•	31	0.35	•	20		0.24	•	15	0.78		44		0.91		10	0.83		55		0.64	•	49
165	Vancouver Midtown	0.93		97	↘	1.11		47	0.47	•	17		0.42	•	15	0.97		28		1.03		7	0.83		37		0.83		36
166	Vancouver South	0.84	•	170		0.68	•	59	0.44	•	25	↘	0.39	•	17	0.74	•	44		0.70		9	0.74	•	50	↘	0.76		46
201	Surrey	0.97		358		1.00		194	0.86		127	↘	0.78	•	115	0.91		86		1.05		38	0.82	•	143	↘	0.77	•	139
202	South Surrey/White Rock	0.74	•	140		0.80		39	0.80		28		0.99		21	0.71	•	41		1.06		8	0.83		35		1.05		33
	PROVINCIAL TOTAL	**1.00**		**6,429**	↘	**1.00**		**2,818**	**1.00**		**1,834**	↘	**1.00**		**1,601**	**1.00**		**1,794**	↘	**1.00**		**473**	**1.00**		**2,212**	↘	**1.00**		**2,024**

Please refer to footnotes on Table E

Table B

MORTALITY STATISTICS BY LOCAL HEALTH AREA, BRITISH COLUMBIA, 2005-2009

		17 Alcohol-Related Deaths							18 Medically Treatable Disease							19 Drug-Induced Deaths							20 Smoking-Attributable Deaths						
Local Health Area		SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75
001	Fernie	1.13		37		0.96		28	0.66		2		0.58		2	0.56		4		0.65		4	1.20		91	↘	1.10		49
002	Cranbrook	1.48	*	90		1.28		66	0.40		2		0.44		2	1.22		14		1.25		14	1.16	*	203	↘	0.87		69
003	Kimberley	1.46	*	34		1.48		24	1.74		3		1.75		3	0.51		2		0.39	+	2	0.97		70	↘	0.86		25
004	Windermere	1.19		29		0.79		19	-		-		-		-	0.42		2		0.60		2	0.83		54		0.60	*	20
005	Creston	1.06		40		1.23		29	2.13		5		2.06		5	0.58		3		0.49		3	1.05		140		1.33		57
006	Kootenay Lake	1.12		12		2.17		11	-		-		-		-	0.56		1		1.27		1	0.97		30		1.16		16
007	Nelson	1.56	*	92		1.36		66	1.00		5		1.09		5	0.94		11		0.94		10	0.95		158		0.94		65
009	Castlegar	1.49	*	49		1.72	*	34	2.31		6		2.82		6	0.98		6		0.87		5	1.18		116		1.16		52
010	Arrow Lakes	1.83	*	26		1.72		15	-		-		-		-	0.45		1		0.42		1	0.97		42	↘	0.81		17
011	Trail	1.94	*	100	↗	1.95	*	73	1.58		6		1.74		6	1.00		9		0.79		9	1.15		196	↘	1.16		68
012	Grand Forks	1.58	*	43		2.03	*	31	-		-		-		-	0.50		2		0.60		2	1.05		95		1.16		39
013	Kettle Valley	0.98		11		0.65		7	-		-		-		-	0.58		1		0.89		1	0.89		27		1.12		15
014	Southern Okanagan	1.71	*	114		1.89	*	77	1.06		4		0.88		4	0.72		6		0.77		5	1.05		260		1.36	*	98
015	Penticton	1.20	*	146		1.39	*	101	1.44		11		1.50		11	1.91	*	35	↗	1.94	*	32	1.04		493		1.03		144
016	Keremeos	1.79	*	31		2.95	*	24	-		-		-		-	0.91		2		1.16		2	1.26		75		1.14		28
017	Princeton	0.90		15		0.87		11	1.80		2		2.84		2	1.29		3		1.50		3	1.36	*	68	↘	1.37		38
018	Golden	1.24		19		1.52		16	1.39		2		2.24		2	0.28		1		0.45		1	1.12		40	↘	1.13		23
019	Revelstoke	0.99		18		0.81		14	1.25		2		0.96		2	0.26		1		0.16	+	1	1.14		54	↘	1.10		23
020	Salmon Arm	1.10		107		1.55	*	83	0.88		6		0.74		6	1.12		17		1.39		17	0.97		305	↘	0.90		112
021	Armstrong-Spallumcheen	0.76		19		0.76		14	-		-		-		-	0.70		3		0.77		3	0.95		74	↘	0.84		25
022	Vernon	1.02		172		1.24		136	1.21		15		1.21		15	1.18		34		1.14		33	1.10	*	601	↘	1.10		217
023	Central Okanagan	1.00		445		1.07		333	0.97		32	↗	1.01		32	1.09		87		1.07		82	1.00		1,432	↘	0.99		495
024	Kamloops	1.15	*	296	↘	1.14		225	1.51	*	32		1.51		32	1.02		51	↘	1.01		48	1.13	*	801	↘	1.15		353
025	100 Mile House	1.30		55		1.71	*	50	0.63		2		1.15		2	0.88		6		1.02		6	1.19	*	134		1.21		70
026	North Thompson	2.12	*	23		2.59	*	19	2.22		2		2.52		2	1.00		2		1.20		2	1.37		38		1.73		22
027	Cariboo-Chilcotin	2.29	*	135		2.98	*	117	0.76		4		0.52		4	1.46		18	↗	1.65		18	1.17	*	163	↘	1.18		88
028	Quesnel	1.41	*	77		1.72	*	64	1.08		5		0.87		5	0.74		8		0.78		8	1.34	*	187	↘	1.43	*	86
029	Lillooet	3.27	*	34		2.32	*	24	3.50		3		3.09		3	1.98		4		1.84		4	1.49	*	41		1.82		23
030	South Cariboo	2.56	*	52		3.34	*	44	3.36	*	5		4.44		5	2.43	*	8		2.78		8	1.25		70		1.43		35
031	Merritt	2.19	*	62		2.26	*	46	1.78		4		1.32		4	1.72		9		1.70		9	1.35	*	106		1.43		50
032	Hope	1.94	*	45		2.73	*	37	2.48		4		2.44		4	1.36		5		0.86		3	1.64	*	117		1.77	*	57
033	Chilliwack	0.90		169		0.94		134	1.39		20		1.42		20	1.49	*	53		1.57	*	52	1.25	*	737		1.39	*	298
034	Abbotsford	0.78	*	214		0.82	*	176	0.96		22		0.91		22	1.11		65		1.23		64	1.03		889	↘	1.03		301
035	Langley	0.86	*	231		0.78	*	175	1.15		27		1.13		27	0.80		46		0.88		44	1.11	*	868	↘	1.05		318
037	Delta	0.68	*	156		0.61	*	111	1.16		23		1.16		23	0.65	*	30		0.65	*	29	0.93		573	↘	0.90		219
038	Richmond	0.38	*	158		0.29	*	110	0.44	*	16		0.34	*	16	0.39	*	35	↘	0.38	*	33	0.75	*	851	↘	0.67	*	311
040	New Westminster	1.43	*	196	↘	1.17		154	0.97		12		1.23		12	1.49	*	47	↘	1.56	*	46	1.23	*	489	↘	1.24	*	183
041	Burnaby	0.73	*	342	↘	0.49	*	222	0.62	*	25		0.54	*	25	0.72	*	75	↘	0.65	*	71	0.95		1,294	↘	0.83	*	413
042	Maple Ridge	0.85	*	154		0.69	*	117	1.11		19		1.06		19	0.88		37		0.82		36	1.23	*	567	↘	1.17		240
043	Coquitlam	0.61	*	254	↘	0.55	*	206	0.59	*	24		0.56	*	24	0.61	*	61	↘	0.62	*	60	0.95		907	↘	0.85	*	396
044	North Vancouver	0.55	*	168	↘	0.54	*	123	0.59	*	16		0.72		16	0.69	*	45		0.72	*	43	0.86	*	734	↘	0.71	*	250
045	West Vancouver-Bowen Is.	0.50	*	72		0.37	*	39	0.79		8		0.74		8	0.49	*	11		0.50	*	10	0.74	*	392	↘	0.45	*	84
046	Sunshine Coast	0.99		84		0.88		58	0.64		4		0.48		4	0.67		9		0.68		9	0.98		264	↘	1.00		111
047	Powell River	1.62	*	91		2.25	*	78	1.46		6		1.69		6	1.98	*	18		1.96		16	1.06		186	↘	1.08		77
048	Howe Sound	1.34	*	77		1.37		65	0.81		5		0.61		5	0.96		16		0.89		15	0.96		100	↘	0.97		53
049	Bella Coola Valley	5.07	*	33		6.86	*	29	1.77		1		0.86		1	0.74		1		0.59		1	1.01		16		1.30		10
050	Queen Charlotte	3.66	*	38		2.77	*	31	1.00		1		2.06		1	1.30		3		1.40		3	1.40		32		1.40		17
051	Snow Country	2.32		3		4.35		3	-		-		-		-	-		-		-		-	1.94		5		1.75		2
052	Prince Rupert	2.32	*	70		2.58	*	60	1.06		3		0.91		3	1.21		8		1.14		8	1.20		84	↘	1.06		44
053	Upper Skeena	1.79	*	19		2.21		14	1.02		1		0.66		1	0.42		1		0.40		1	0.88		20		0.74		13
054	Smithers	1.43	*	46		1.46		35	0.65		2		0.49		2	0.55		4		0.53		4	1.14		82		0.96		37
055	Burns Lake	1.84	*	32		2.10	*	28	0.67		1		0.72		1	-		-		-		-	1.25		55		1.03		25
056	Nechako	2.27	*	71	↗	1.94	*	54	1.44		4		1.48		4	1.03		7		1.09		7	1.60	*	116		1.77	*	58
057	Prince George	1.43	*	277		1.41	*	226	1.56	*	29		1.48		29	1.00		45		0.96		44	1.32	*	555	↘	1.29	*	299
059	Peace River South	1.45	*	80		1.76	*	75	1.39		7		1.48		7	0.25	+	3		0.19	+	3	1.14		147		1.06		72
060	Peace River North	1.41	*	78		1.66	*	70	0.53		3		0.57		3	0.33	*	5		0.30	*	5	1.32	*	145	↘	1.39	*	81
061	Greater Victoria	1.25	*	671		1.18	*	480	1.02		42		1.06		42	1.45	*	151		1.47	*	141	0.99		1,920	↘	1.09		552
062	Sooke	1.03		136		1.16		114	0.94		12		1.12		12	0.88		27		0.92		27	1.01		318	↘	0.95		130
063	Saanich	0.74	*	143		0.80		89	0.47		6		0.48	*	6	0.74		21		0.75		18	0.79	*	580	↘	0.72	*	152
064	Gulf Islands	1.25		63		1.29		42	-		-		-		-	1.12		8		1.60		8	0.68	*	116	↘	0.91		44
065	Cowichan	1.27	*	179		1.56	*	142	0.65		7		0.84		7	0.95		24		1.05		24	1.01		438	↘	1.09		173
066	Lake Cowichan	1.11		18		0.99		16	3.08		4		2.36		4	1.36		4		1.56		4	1.09		46		1.24		23
067	Ladysmith	1.28		68		1.59	*	48	1.05		4		1.07		4	0.48		4		0.56		3	1.23	*	216	↘	1.23		84
068	Nanaimo	1.14	*	292		1.15		223	1.17		23		1.18		23	0.93		43	↘	0.83		38	1.05		852	↘	1.12		342
069	Qualicum	0.94		143		1.12		96	0.43		4		0.64		4	0.61		12		0.68		12	0.96		514	↘	1.01		186
070	Alberni	2.19	*	174		2.65	*	148	0.96		6		0.74		6	0.90		13		0.95		12	1.15	*	258	↘	1.26		108
071	Courtenay	1.37	*	226	↗	1.18		160	0.55		7		0.39	*	7	0.94		27		0.92		26	0.98		488	↘	0.96		188
072	Campbell River	1.46	*	144		1.58	*	124	0.70		6		0.85		6	1.39		27		1.40		27	1.16	*	292	↘	1.19		141
075	Mission	1.03		86		1.20		77	0.65		5		1.04		5	1.35		26		1.45		26	1.41	*	299		1.33	*	127
076	Agassiz-Harrison	1.12		26		1.71		18	1.80		3		1.64		3	2.06		8		2.09		7	0.95		67	↘	1.15		37
077	Summerland	0.67	*	24		0.88		17	-		-		-		-	0.20		1		0.30	+	1	0.94		131	↘	0.86		38
078	Enderby	1.41		29		1.66		19	2.01		3		4.07		3	1.18		4		0.70		3	1.22		78		1.53		34
080	Kitimat	1.17		27		1.18		26	1.41		3		1.04		3	0.60		3		0.50		3	1.35	*	65		1.28		36
081	Fort Nelson	1.41		13		1.64		13	2.72		3		2.68		3	0.67		2		0.66		2	1.97	*	24		1.42		13
083	Central Coast	7.46	*	20		6.62	*	14	8.01		2		7.10		2	1.53		1		1.60		1	0.82		5		0.92		3
084	Vancouver Island West	1.84		11		1.70		10	1.88		1		2.53		1	-		-		-		-	1.34		17		1.99		14
085	Vancouver Island North	2.91	*	76		3.28	*	71	1.56		4		2.07		4	1.70		10		1.90		10	1.70	*	83		1.77	*	51
087	Stikine	4.52	*	11		2.74		10	-		-		-		-	-		-		-		-	0.72		4		1.04		4
088	Terrace	1.99	*	83		2.56	*	77	1.30		5		1.31		5	0.77		7		1.08		7	1.33	*	126		1.41		70
092	Nisga'a	3.81	*	14		5.56	*	12	-		-		-		-	2.31		2		3.65		2	1.78		13		1.66		7
094	Telegraph Creek	5.04	*	6		10.88	*	6	8.61		1		11.15		1	-		-		-		-	0.36		1		0.70		0
161	Vancouver City Centre	0.78	*	180	↘	0.62	*	152	1.39		31		1.16		31	1.35	*	87	↘	1.10		85	0.98		536	↘	0.94		218
162	Van. Downtown E. Side	2.31	*	327	↘	2.34	*	287	4.40	*	53		4.37	*	53	5.83	*	194	↘	5.63	*	193	1.12	*	426	↘	1.97	*	246
163	Vancouver North East	0.51	*	114	↘	0.42	*	75	0.92		17		0.72		17	0.72	*	35	↘	0.72	*	35	0.86	*	540	↘	0.84	*	194
164	Vancouver West Side	0.45	*	124	↘	0.32	*	80	0.73		18		0.81		18	0.53	*	33	↘	0.41	*	29	0.74	*	614	↘	0.54	*	155
165	Vancouver Midtown	0.75	*	129	↘	0.76	*	106	0.75		12		0.80		12	0.93		40	↘	0.89		39	0.89	*	409	↘	0.89		146
166	Vancouver South	0.50	*	147	↘	0.48	*	98	0.69		17		0.69		17	0.46	*	29	↘	0.51	*	29	0.79	*	722	↘	0.72	*	226
201	Surrey	0.82	*	561		0.84	*	475	1.15		75		1.08		75	1.08		180		1.07		178	0.99		1,577	↘	1.02		723
202	South Surrey/White Rock	0.59	*	135		0.56	*	87	0.75		12		0.75		12	0.74		27		0.84		24	0.90	*	782	↘	0.70	*	190
	PROVINCIAL TOTAL	**1.00**		**9,954**	↘	**1.00**		**7,058**	**1.00**		**831**		**1.00**		**831**	**1.00**		**2,037**	↘	**1.00**		**1,963**	**1.00**		**28,932**	↘	**1.00**		**11,089**

Please refer to footnotes on Table E

TABLE C

SUMMARY STATISTICS BY HEALTH SERVICE DELIVERY AREA

BRITISH COLUMBIA, 2005-2009

Health Service Delivery Area		2009 Population	Live Birth		Stillbirth		Death		Infant Death	
			Total	Rate	Total	Rate[2]	Total	Rate	Total	Rate[1]
11	East Kootenay	79,996	3,686	9.59	19	5.13	3,106	8.08	12	3.26
12	Kootenay Boundary	79,305	3,136	8.12	24	7.59	3,684	9.54	7	2.23
13	Okanagan	350,945	14,273	8.51	105	7.30	16,588	9.89	56	3.92
14	Thompson/Cariboo/Shushwap	223,039	10,015	9.24	72	7.14	8,902	8.21	48	4.79
21	Fraser East	279,993	16,571	12.22	142	8.50	10,450	7.70	59	3.56
22	Fraser North	596,647	29,733	10.32	223	7.44	17,030	5.91	87	2.93
23	Fraser South	695,983	38,243	11.44	286	7.42	20,648	6.18	152	3.97
31	Richmond	193,255	8,391	9.00	70	8.27	4,479	4.80	27	3.22
32	Vancouver	643,208	30,113	9.67	279	9.18	18,787	6.03	134	4.45
33	North Shore/Coast Garibaldi	277,974	11,748	8.65	96	8.11	9,611	7.07	43	3.66
41	South Vancouver Island	367,578	14,790	8.22	104	6.98	16,424	9.13	69	4.67
42	Central Vancouver Island	261,476	10,967	8.62	103	9.30	12,096	9.51	62	5.65
43	North Vancouver Island	120,315	5,242	8.96	40	7.57	4,578	7.83	20	3.82
51	Northwest	75,007	4,495	11.93	40	8.82	2,326	6.17	21	4.67
52	Northern Interior	142,581	8,313	11.74	71	8.47	4,466	6.31	33	3.97
53	Northeast	67,905	4,997	15.11	34	6.76	1,666	5.04	20	4.00
	Provincial Total	**4,455,207**	**214,744**	**9.95**	**1,708**	**7.89**	**154,885**	**7.17**	**850**	**3.96**

Health Service Delivery Area		Low Birth Wt. Live Birth		Cesarean		Pre-term		Teenage Mother		Elderly Gravida	
		Total	Rate[1]	Total	Rate[1]	Total	Rate[1]	Total	Rate[1]	Total	Rate[1]
11	East Kootenay	211	57.24	1,113	301.95	268	72.71	220	59.69	526	142.70
12	Kootenay Boundary	152	48.47	771	245.85	198	63.14	110	35.08	549	175.06
13	Okanagan	730	51.15	4,289	300.50	1,041	72.93	629	44.07	2,337	163.74
14	Thompson/Cariboo/Shushwap	556	55.52	3,326	332.10	820	81.88	595	59.41	1,373	137.09
21	Fraser East	841	50.75	4,642	280.13	1,227	74.05	756	45.62	2,152	129.87
22	Fraser North	1,747	58.76	9,461	318.20	2,275	76.51	437	14.70	8,315	279.66
23	Fraser South	2,364	61.82	12,257	320.50	2,911	76.12	819	21.42	7,439	194.52
31	Richmond	467	55.65	2,631	313.55	582	69.36	58	6.91	2,622	312.48
32	Vancouver	1,835	60.94	8,943	296.98	2,423	80.46	358	11.89	10,545	350.18
33	North Shore/Coast Garibaldi	595	50.65	3,717	316.39	874	74.40	273	23.24	3,917	333.42
41	South Vancouver Island	747	50.51	5,089	344.08	1,127	76.20	416	28.13	3,516	237.73
42	Central Vancouver Island	591	53.89	2,955	269.44	982	89.54	680	62.00	1,755	160.03
43	North Vancouver Island	269	51.32	1,466	279.66	355	67.72	353	67.34	820	156.43
51	Northwest	206	45.83	1,197	266.30	339	75.42	454	101.00	585	130.14
52	Northern Interior	453	54.49	2,323	279.44	570	68.57	606	72.90	970	116.68
53	Northeast	211	42.23	1,446	289.37	241	48.23	381	76.25	491	98.26
	Provincial Total	**11,976**	**55.77**	**65,634**	**305.64**	**16,236**	**75.61**	**7,149**	**33.29**	**47,918**	**223.14**

Please refer to footnotes on Table E

TABLE D

MORTALITY STATISTICS BY HEALTH SERVICE DELIVERY AREA

BRITISH COLUMBIA, 2005-2009

	Health Service Delivery Area	01 All Causes of Death							02 All Cancer Sites							03 Lung Cancer							04 End/Nut/Met. Diseases						
		SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75
11	East Kootenay	1.07	*	3,106	↘	1.07		1,218	0.96		829		0.96		444	1.02		228		0.99		130	1.17		142		0.94		49
12	Kootenay Boundary	1.12	*	3,684	↘	1.15	*	1,411	1.06		996	↘	1.09		541	0.92		228		1.01		148	1.09		150		0.90		52
13	Okanagan	1.03	*	16,588	↘	1.09	*	5,486	1.05	*	4,715		1.05		2,201	1.09	*	1,281		1.12	*	677	1.02		691	↗	1.06		210
14	Thompson/Cariboo/Shuswap	1.14	*	8,902	↘	1.30	*	4,031	1.05	*	2,459	↘	1.05		1,383	1.17	*	729		1.21	*	440	1.17	*	384	↗	1.18		161
21	Fraser East	1.09	*	10,450	↘	1.14	*	3,989	1.07	*	2,831	↘	1.11	*	1,477	1.06		732		1.16	*	447	1.19	*	467	↗	1.24		179
22	Fraser North	0.98	*	17,030	↘	0.82	*	6,255	1.00		4,866	↘	0.94	*	2,502	1.05		1,319	↘	0.97		716	0.94		661		0.89		253
23	Fraser South	0.99		20,648	↘	0.93	*	7,764	0.97	*	5,724	↘	0.98		3,038	0.92	*	1,415	↘	0.92	*	797	1.01		863	↗	1.00		310
31	Richmond	0.73	*	4,479	↘	0.59	*	1,539	0.80	*	1,377	↘	0.79	*	722	0.77	*	345	↘	0.70	*	188	0.76	*	190		0.56	*	73
32	Vancouver	0.91	*	18,787	↘	0.93	*	7,016	0.89	*	5,014	↘	0.90	*	2,466	0.84	*	1,212	↘	0.80	*	609	0.82	*	690		0.81	*	242
33	North Shore/Coast Garibaldi	0.92	*	9,611	↘	0.82	*	3,178	0.92	*	2,692	↘	0.87	*	1,331	0.75	*	571	↘	0.72	*	324	0.81	*	348		0.66	*	114
41	South Vancouver Island	0.96	*	16,424	↘	0.97		4,795	0.99		4,457	↘	1.01		1,969	0.92	*	1,047	↘	0.96		496	0.86	*	604		1.09		199
42	Central Vancouver Island	1.05	*	12,096	↘	1.21	*	4,578	1.08	*	3,567	↘	1.12	*	1,828	1.11	*	968		1.16	*	538	1.09		525	↗	1.11		187
43	North Vancouver Island	1.08	*	4,578	↘	1.20	*	2,062	1.10	*	1,391	↘	1.16	*	795	1.26	*	422		1.25	*	247	1.14		202		1.03		78
51	Northwest	1.28	*	2,326	↘	1.37	*	1,274	1.15	*	657		1.12		408	1.29	*	196		1.17		133	1.64	*	125	↗	1.80	*	69
52	Northern Interior	1.25	*	4,468	↘	1.30	*	2,364	1.25	*	1,374		1.24	*	876	1.56	*	454		1.49	*	295	1.64	*	242	↗	1.82	*	128
53	Northeast	1.21	*	1,886	↘	1.28	*	922	1.22	*	503		1.22	*	339	1.28	*	139		1.41	*	103	1.51	*	84		1.15		34
	Provincial Total	**1.00**		**154,885**	↘	**1.00**		**57,924**	**1.00**		**43,455**	↘	**1.00**		**22,321**	**1.00**		**11,287**	↘	**1.00**		**6,289**	**1.00**		**6,369**	↗	**1.00**		**2,338**

	Health Service Delivery Area	05 Diabetes							06 Circulatory System							07 Ischemic Heart Diseases							08 Cerebrovascular Diseases/Stroke						
		SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75
11	East Kootenay	1.19		114	↗	0.98		38	1.05		937	↘	0.90		228	0.97		407	↘	1.01		124	0.93		195	↘	0.61	*	32
12	Kootenay Boundary	1.15		125		0.73		38	1.20	*	1,241	↘	1.17	*	306	1.24	*	597	↘	1.14		161	1.18	*	290	↘	1.14		58
13	Okanagan	1.02		549	↗	0.94		153	1.00		5,233	↘	1.02		1,051	0.94	*	2,265	↘	0.95		537	0.99		1,245	↘	1.12		205
14	Thompson/Cariboo/Shuswap	1.19	*	309	↗	1.24		129	1.10	*	2,582	↘	1.19	*	805	1.09	*	1,216	↘	1.30	*	482	1.05		580	↘	1.04		133
21	Fraser East	1.21	*	374	↗	1.35	*	140	1.11	*	3,308	↘	1.13	*	773	1.18	*	1,640	↘	1.23	*	439	0.97		692	↘	1.18		147
22	Fraser North	0.93		515		0.93		194	1.02		5,376	↘	0.91	*	1,239	1.14	*	2,785	↘	0.94		679	0.97		1,212	↘	1.00		254
23	Fraser South	1.01		677	↗	0.96		236	1.03	*	6,553	↘	0.99		1,525	1.13	*	3,325	↘	1.11	*	911	0.99		1,496	↘	0.90		257
31	Richmond	0.80	*	157		0.69	*	59	0.73	*	1,362	↘	0.59	*	278	0.76	*	657	↘	0.54	*	144	0.83	*	370	↘	0.66	*	61
32	Vancouver	0.80	*	524		0.86		183	0.86	*	5,567	↘	0.98		1,337	0.81	*	2,396	↘	0.86	*	649	0.96		1,488	↘	1.01		274
33	North Shore/Coast Garibaldi	0.81	*	273		0.68	*	83	0.98		3,211	↘	0.86	*	639	0.92	*	1,391	↘	0.83	*	341	1.16	*	904	↘	0.81	*	121
41	South Vancouver Island	0.82	*	452	↗	0.96		137	0.96	*	5,457	↘	0.94		880	0.90	*	2,320	↘	0.88	*	452	0.95		1,316	↘	1.00		165
42	Central Vancouver Island	1.11	*	428	↗	1.10		152	1.02		3,723	↘	1.11	*	849	1.03		1,757	↘	1.06		451	0.97		838	↘	1.09		149
43	North Vancouver Island	1.14		159		1.06		58	1.05		1,331	↘	1.12		408	0.93		563	↘	1.03		202	1.20	*	357	↘	1.28		87
51	Northwest	1.51	*	108	↗	1.72	*	56	1.24	*	629	↘	1.37	*	255	1.24	*	304	↘	1.47	*	155	1.10		127	↘	1.41		40
52	Northern Interior	1.58	*	183	↗	1.67	*	94	1.19	*	1,193	↘	1.16	*	430	1.08		522	↘	1.15		221	1.28	*	294		1.17		88
53	Northeast	1.62	*	70		1.24		27	1.13	*	421	↘	1.09		149	1.16	*	206	↘	1.22		85	0.96		81		0.64	*	26
	Provincial Total	**1.00**		**5,018**	↗	**1.00**		**1,777**	**1.00**		**48,129**	↘	**1.00**		**11,156**	**1.00**		**22,355**	↘	**1.00**		**6,035**	**1.00**		**11,486**	↘	**1.00**		**2,097**

	Health Service Delivery Area	09 Arteries/Arterioles/Capillaries							10 Respiratory System							11 Pneumonia and Influenza							12 Chronic Lung Disease						
		SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75
11	East Kootenay	1.32	*	83		0.84		20	1.14	*	354		1.19		108	0.78	*	94		0.89		17	1.46	*	188		1.62	*	63
12	Kootenay Boundary	1.39	*	78		2.41	*	28	0.94		337		1.25		89	0.70	*	99	↘	1.11		25	1.25	*	185		1.13		45
13	Okanagan	1.11		305	↘	0.88		74	0.97		1,775	↘	1.11		363	0.94		681	↘	1.27		104	1.04		786		1.09		184
14	Thompson/Cariboo/Shuswap	1.25	*	159	↘	1.24		53	1.05		862	↘	1.18		267	0.85	*	282	↘	1.32		68	1.31	*	452	↘	1.32	*	154
21	Fraser East	0.98		154	↘	1.05		41	1.25	*	1,306		1.34	*	312	1.37	*	567		1.23		90	1.27	*	544		1.54	*	163
22	Fraser North	0.76	*	210	↘	0.93		66	1.08	*	1,969	↘	0.75	*	379	1.09	*	790	↘	0.64	*	96	1.03		761	↘	0.86		187
23	Fraser South	1.04		349	↘	0.69	*	79	1.03		2,259		0.86	*	480	1.18	*	1,022		0.95		163	0.95		850	↘	0.79	*	212
31	Richmond	0.52	*	51		0.56	*	14	0.81	*	527	↘	0.42	*	90	0.79	*	202	↘	0.19	*	19	0.72	*	190	↘	0.43	*	40
32	Vancouver	0.88	*	283		0.94		89	1.00		2,228	↘	1.17	*	475	1.13	*	1,020	↘	1.34	*	178	0.76	*	582	↘	1.02		173
33	North Shore/Coast Garibaldi	0.92		158		0.69	*	40	0.90	*	1,026	↘	0.68	*	177	1.06		460	↘	0.91		64	0.74	*	340	↘	0.52	*	70
41	South Vancouver Island	0.94		272	↘	1.02		62	0.84	*	1,662	↘	0.95		286	0.71	*	579	↘	0.90		74	0.93	*	719	↘	0.87		134
42	Central Vancouver Island	1.11		215	↘	1.15		69	0.96		1,224	↘	1.16		296	0.92		457	↘	1.19		78	0.99		524	↘	1.02		149
43	North Vancouver Island	1.28	*	88		1.41		38	0.95		420	↘	1.17		124	0.71	*	120	↘	1.04		25	1.12		208		1.19		62
51	Northwest	0.92		28		1.19		13	1.21	*	212		1.22		73	1.01		65	↘	1.10		14	1.25	*	93		1.10		34
52	Northern Interior	1.59	*	88		1.91	*	44	1.20	*	417	↘	1.36	*	154	0.94		122	↘	0.90		34	1.47	*	215		1.81	*	80
53	Northeast	1.16		24		1.69		11	1.19	*	154	↘	0.87		48	1.01		49		0.61		11	1.50	*	81		1.19		30
	Provincial Total	**1.00**		**2,531**	↘	**1.00**		**741**	**1.00**		**16,735**	↘	**1.00**		**3,724**	**1.00**		**6,620**	↘	**1.00**		**1,060**	**1.00**		**6,819**	↘	**1.00**		**1,781**

Please refer to footnotes on Table E

TABLE D (CONT'D)

MORTALITY STATISTICS BY HEALTH SERVICE DELIVERY AREA

BRITISH COLUMBIA, 2005-2009

		13 Digestive System							14 Motor Vehicle Accidents							15 Unintentional Falls							16 Suicide						
	Health Service Delivery Area	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75
11	East Kootenay	0.93		113		0.77		52	1.83	*	59		1.88	*	48	1.52	*	50		1.10		14	1.28		51		1.18		46
12	Kootenay Boundary	1.22	*	168		0.93		67	1.68	*	55		1.68	*	48	1.68	*	64		1.89		19	1.16		47		1.03		41
13	Okanagan	1.00		661		1.18	*	259	1.34	*	195		1.45	*	164	1.09		208	↘	0.96		40	1.09		190	↘	1.21	*	174
14	Thompson/Cariboo/Shuswap	1.38	*	455		1.55	*	237	2.18	*	199	↘	2.23	*	184	1.21		105		0.88		27	1.16		130	↘	1.27	*	124
21	Fraser East	1.05		410		1.17		206	1.20	*	136	↘	1.24	*	120	0.90		100		1.17		30	0.98		130	↘	1.01		122
22	Fraser North	0.99		718	↘	0.78	*	299	0.74	*	180		0.75	*	166	0.86		172	↘	0.67	*	44	0.83	*	244	↘	0.75	*	227
23	Fraser South	0.94		817		0.90		346	0.88	*	243	↘	0.84	*	212	0.82	*	195		0.86		60	0.79	*	260	↘	0.76	*	244
31	Richmond	0.72	*	184	↘	0.55	*	63	0.45	*	36	↘	0.43	*	26	0.48	*	34	↘	0.34	*	8	0.65	*	62		0.56	*	55
32	Vancouver	0.89	*	762	↘	0.88	*	322	0.45	*	122	↘	0.33	*	91	0.83	*	202	↘	1.01		62	1.02		338	↘	0.97		316
33	North Shore/Coast Garibaldi	0.92		401		0.76	*	149	0.78	*	90		0.87		83	0.84		102	↘	1.53		31	0.91		127	↘	0.87		113
41	South Vancouver Island	0.93		649		0.99		231	0.55	*	87		0.53	*	71	1.25	*	262	↘	0.98		50	0.99		186	↘	1.02		159
42	Central Vancouver Island	1.06		504		1.36	*	252	1.23	*	134	↘	1.47	*	112	1.06		141	↘	1.01		31	1.29	*	171	↘	1.38	*	145
43	North Vancouver Island	1.18	*	211		1.16		106	1.36	*	66		1.30		57	1.24		58		1.98		20	1.57	*	95		1.79	*	89
51	Northwest	1.46	*	117		1.47	*	78	1.49	*	45		1.28		41	1.91	*	37		2.23		18	1.62	*	60		2.15	*	58
52	Northern Interior	1.31	*	202		1.34	*	113	1.81	*	105	↘	1.82	*	99	1.36	*	52		0.94		15	1.23		87		1.27		79
53	Northeast	0.92		54		0.99		35	2.96	*	80		3.29	*	77	0.82		12		0.59		4	1.00		32		1.03		30
	Provincial Total	**1.00**		**6,429**	↘	**1.00**		**2,818**	**1.00**		**1,834**	↘	**1.00**		**1,601**	**1.00**		**1,794**	↘	**1.00**		**473**	**1.00**		**2,212**	↘	**1.00**		**2,024**

		17 Alcohol-Related Deaths							18 Medically Treatable Disease							19 Drug-Induced Deaths							20 Smoking-Attributable Deaths						
	Health Service Delivery Area	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75
11	East Kootenay	1.28	*	249		1.19		182	0.90		14		0.95		14	0.72		26		0.76		26	1.07		597	↘	0.99		242
12	Kootenay Boundary	1.61	*	333		1.67	*	237	1.07		17		1.25		17	0.85		31		0.84		29	1.06		663	↘	1.07		273
13	Okanagan	1.09	*	995		1.21	*	732	1.04		67		1.12		67	1.15		175		1.14		164	1.04	*	3,211	↘	1.06		1,117
14	Thompson/Cariboo/Shuswap	1.44	*	782		1.64	*	622	1.38	*	60		1.36		60	1.15		116		1.22		113	1.13	*	1,712	↘	1.16	*	778
21	Fraser East	0.91	*	540		1.01		442	1.12		54		1.15		54	1.30	*	157		1.38	*	152	1.17	*	2,089	↘	1.23	*	820
22	Fraser North	0.79	*	946	↘	0.62	*	699	0.72	*	80		0.70	*	80	0.79	*	220	↘	0.77	*	213	1.03		3,257	↘	0.94		1,232
23	Fraser South	0.77	*	1,083		0.76	*	848	1.10		137		1.06		137	0.92		263		0.95		275	0.98		3,800	↘	0.96		1,450
31	Richmond	0.38	*	158		0.29	*	110	0.44	*	16		0.34	*	16	0.39	*	35	↘	0.38	*	33	0.75	*	851	↘	0.67	*	311
32	Vancouver	0.76	*	1,022	↘	0.70	*	799	1.26	*	148		1.20		148	1.33	*	419	↘	1.24	*	411	0.86	*	3,250	↘	0.89	*	1,187
33	North Shore/Coast Garibaldi	0.83	*	543	↘	0.87	*	406	0.77		42		0.79		42	0.79	*	101		0.79	*	95	0.87	*	1,697	↘	0.77	*	588
41	South Vancouver Island	1.11	*	1,013		1.11	*	725	0.85		60		0.93		60	1.21	*	207		1.26	*	194	0.93	*	2,934	↘	0.98		886
42	Central Vancouver Island	1.25	*	874		1.45	*	673	0.94		48		0.98		48	0.86		100	↘	0.87		93	1.05	*	2,325	↘	1.12	*	916
43	North Vancouver Island	1.55	*	457		1.56	*	365	0.74		18		0.78		18	1.16		64		1.18		63	1.08	*	880	↘	1.14	*	394
51	Northwest	2.02	*	317		2.28	*	274	1.09		16		1.05		16	0.81		28		0.90		28	1.24	*	432	↘	1.19		229
52	Northern Interior	1.54	*	457	↗	1.56	*	372	1.42	*	39		1.34		39	0.91		60		0.89		59	1.35	*	912	↘	1.35	*	470
53	Northeast	1.43	*	171		1.70	*	158	1.10		13		1.15		13	0.33	*	10		0.30	*	10	1.26	*	316	↘	1.24	*	165
	Provincial Total	**1.00**		**9,954**	↘	**1.00**		**7,658**	**1.00**		**831**		**1.00**		**831**	**1.00**		**2,037**	↘	**1.00**		**1,963**	**1.00**		**28,932**	↘	**1.00**		**11,059**

Please refer to footnotes on Table E

TABLE E
SUMMARY STATISTICS BY HEALTH AUTHORITY
BRITISH COLUMBIA, 2005-2009

	Health Authority	2009 Population	Live Birth Total	Live Birth Rate	Stillbirth Total	Stillbirth Rate^2	Death Total	Death Rate	Infant Death Total	Infant Death Rate^1
01	Interior	733,285	31,110	8.81	220	7.02	32,280	2.90	123	3.95
02	Fraser	1,572,623	84,547	11.15	651	7.64	48,128	3.71	298	3.52
03	Vancouver Coastal	1,114,437	50,252	9.30	445	8.78	32,877	3.63	204	4.06
04	Vancouver Island	749,369	30,999	8.48	247	7.91	33,098	6.53	151	4.87
05	Northern	285,493	17,805	12.58	145	8.08	8,458	5.98	74	4.16
	Provincial Total	**4,455,207**	**214,744**	**9.96**	**1,708**	**7.89**	**154,885**	**7.17**	**850**	**3.96**

	Health Authority	Low Birth Wt. Live Birth Total	Low Birth Wt. Live Birth Rate^1	Cesarean Total	Cesarean Rate^1	Pre-term Total	Pre-term Rate^1	Teenage Mother Total	Teenage Mother Rate^1	Elderly Gravida Total	Elderly Gravida Rate^1
01	Interior	1,649	53.01	9,499	305.34	2,327	74.80	1,554	49.95	4,785	153.81
02	Fraser	4,952	58.57	26,360	311.78	6,413	75.85	2,012	23.80	17,906	211.79
03	Vancouver Coastal	2,897	57.65	15,291	304.29	3,879	77.19	689	13.71	17,084	339.97
04	Vancouver Island	1,607	51.84	9,510	306.78	2,464	79.49	1,449	46.74	6,091	196.49
05	Northern	870	48.86	4,966	278.91	1,150	64.59	1,441	80.93	2,046	114.91
	Provincial Total	**11,976**	**55.77**	**65,634**	**305.64**	**16,236**	**75.61**	**7,149**	**33.29**	**47,918**	**223.14**

Note: Total is the number of events in the specified category for the five year time period.
Infant Death - deaths of children under one year of age.
Low Birth Weight live births - live births with birth weight <2,500 grams.
Cesarean - live births delivered by cesarean section.
Pre-term - live births with gestational age <37 weeks.
Teenage Mother - live births to mothers under 20 years of age.
Elderly Gravida - live births to mothers 35 years of age or older.
Death is the total number of deaths from the specified cause for the five year period.
D<75 is the number of deaths under 75 years of age from the specified cause.
SMR - Standardized Mortality Ratio.
PYLLI - Potential Years of Life Lost Index.
Rate - per 1,000 population in the specified area.
Rate^1 - rate per 1,000 live births in the specified area.
Rate^2 - per 1,000 total births in the specified area.
SMR, PYLLI, and Rate are based on the five year period ending with the current year.
* Statistical testing indicates that observed deaths are statistically different from the expected deaths ($p<0.05$, two tailed).
+ Denotes statistical significance based on less than five cases.
TR - Trend in ASMR based on single year rates for the previous 15 years:
↗ indicates a statistically significantly positive (icreasing) trend, and
↘ indicates a statistically significantly negative (decreasing) trend.
Trends shown in previous annual reports were based on three year moving averages and should not be compared to the trends in these tables.
TR* - Trend reflects change in *Medical Certification of Death* introduced in 1993. The revised form contained questions about lifestyle factors including abuse of alcohol, which resulted in increased reporting of deaths indirectly related to alcohol.
HSDA 32 Vancouver may include unspecified Vancouver addresses.
N.S. - Not Stated.
Non-residents are excluded.

TABLE F

MORTALITY STATISTICS BY HEALTH AUTHORITY

BRITISH COLUMBIA, 2005-2009

		01 All Causes of Death							02 All Cancer Sites							03 Lung Cancer							04 End/Nut/Met. Diseases						
	Health Authority	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75
01	**Interior**	1.07	*	32,280	↘	1.16	*	12,146	1.04	*	8,999	↘	1.04	*	4,569	1.08	*	2,466		1.12	*	1,395	1.08	*	1,367	↗	1.07		472
02	**Fraser**	1.01		48,128	↘	0.93	*	18,008	1.00		13,421	↘	0.99		7,017	1.00		3,466	↘	0.98		1,960	1.02		1,991		1.00		742
03	**Vancouver Coastal**	0.88	*	32,877	↘	0.84	*	11,733	0.89	*	9,083	↘	0.87	*	4,519	0.81	*	2,128	↘	0.76	*	1,121	0.81	*	1,228		0.73	*	429
04	Vancouver Island	1.01		33,098	↘	1.09	*	11,435	1.04	*	9,415	↘	1.08	*	4,592	1.04		2,437	↘	1.08	*	1,281	0.98		1,331	↗	1.09		464
05	Northern	1.24	*	8,458	↘	1.31	*	4,560	1.22	*	2,534		1.20	*	1,621	1.43	*	789		1.38	*	531	1.61	*	451	↗	1.61	*	231
	Provincial Total	**1.00**		**154,885**	↘	**1.00**		**57,924**	**1.00**		**43,455**	↘	**1.00**		**22,321**	**1.00**		**11,287**	↘	**1.00**		**6,289**	**1.00**		**6,369**	↗	**1.00**		**2,338**

		05 Diabetes							06 Circulatory System							07 Ischemic Heart Diseases							08 Cerebrovascular Disease/Stroke						
	Health Authority	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75
01	**Interior**	1.10	*	1,097	↗	1.01		358	1.05	*	9,993	↘	1.08	*	2,390	1.01		4,485	↘	1.09	*	1,304	1.02		2,310	↘	1.04		428
02	**Fraser**	1.02		1,566		1.02		570	1.04	*	15,237	↘	0.99		3,537	1.14	*	7,750	↘	1.07	*	2,029	0.98		3,400	↘	0.99		658
03	**Vancouver Coastal**	0.80	*	954		0.78	*	325	0.88	*	10,140	↘	0.88	*	2,254	0.83	*	4,444	↘	0.80	*	1,134	1.00		2,762	↘	0.89		456
04	Vancouver Island	0.97		1,039	↗	1.03		347	0.99		10,511	↘	1.03		2,137	0.95	*	4,640	↘	0.97		1,105	0.98		2,511	↘	1.08		401
05	Northern	1.65	*	361	↗	1.59	*	177	1.19	*	2,243	↘	1.20	*	834	1.14	*	1,034	↘	1.25	*	461	1.17	*	502	↘	1.12		154
	Provincial Total	**1.00**		**5,018**	↗	**1.00**		**1,777**	**1.00**		**48,129**	↘	**1.00**		**11,156**	**1.00**		**22,355**	↘	**1.00**		**6,035**	**1.00**		**11,486**	↘	**1.00**		**2,097**

		09 Arteries/Arterioles/Capillaries							10 Respiratory System							11 Pneumonia and Influenza							12 Chronic Lung Disease						
	Health Authority	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75
01	**Interior**	1.20	*	603	↘	1.16		175	1.00		3,328	↘	1.16	*	827	0.86	*	1,136	↘	1.20		212	1.17	*	1,611		1.22	*	446
02	**Fraser**	0.93	*	713	↘	0.85		186	1.09	*	5,534	↘	0.90	*	1,171	1.19	*	2,379		0.88		349	1.05	*	2,155	↘	0.95		562
03	**Vancouver Coastal**	0.83	*	502		0.80	*	143	0.94	*	3,781	↘	0.91	*	742	1.07	*	1,711	↘	1.03		261	0.75	*	1,212	↘	0.77	*	283
04	Vancouver Island	1.04		575	↘	1.14		169	0.90	*	3,306	↘	1.06		706	0.78	*	1,156	↘	1.02		177	0.97		1,451	↘	0.98		345
05	Northern	1.32	*	136		1.66	*	68	1.20	*	783	↘	1.22	*	275	0.97		236	↘	0.89		59	1.41	*	389		1.49	*	144
	Provincial Total	**1.00**		**2,531**	↘	**1.00**		**741**	**1.00**		**16,736**	↘	**1.00**		**3,724**	**1.00**		**6,620**	↘	**1.00**		**1,060**	**1.00**		**6,819**	↘	**1.00**		**1,781**

		13 Digestive System							14 Motor Vehicle Accidents							15 Unintentional Falls							16 Suicide						
	Health Authority	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75
01	**Interior**	1.12	*	1,397		1.22	*	615	1.69	*	508	↘	1.77	*	444	1.23	*	427	↘	1.06		100	1.14	*	418	↘	1.21	*	385
02	**Fraser**	0.98		1,945	↘	0.90	*	851	0.88	*	559	↘	0.87	*	498	0.85	*	467	↘	0.84		134	0.84	*	634	↘	0.80	*	593
03	**Vancouver Coastal**	0.87	*	1,347	↘	0.79	*	534	0.53	*	248	↘	0.47	*	200	0.78	*	336	↘	1.02		101	0.93		527	↘	0.88	*	484
04	Vancouver Island	1.01		1,364		1.15	*	589	0.91		287	↘	0.97		240	1.18	*	461	↘	1.16		101	1.18	*	452	↘	1.26	*	393
05	Northern	1.27	*	373		1.30	*	226	2.00	*	230	↘	2.04	*	217	1.40	*	101	↘	1.21		37	1.28	*	179		1.44	*	167
	Provincial Total	**1.00**		**6,429**	↘	**1.00**		**2,818**	**1.00**		**1,834**	↘	**1.00**		**1,601**	**1.00**		**1,794**	↘	**1.00**		**473**	**1.00**		**2,212**	↘	**1.00**		**2,024**

		17 Alcohol-Related Deaths							18 Medically Treatable Disease							19 Drug-Induced Deaths							20 Smoking-Attributable Mortality						
	Health Authority	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75	SMR	(p)	Death	TR	PYLLI	(p)	D<75
01	**Interior**	1.27	*	2,359		1.39	*	1,773	1.13		158		1.19		158	1.07		348		1.09		332	1.07	*	6,184	↘	1.08	*	2,409
02	**Fraser**	0.80	*	2,589		0.75	*	1,989	0.96		271		0.94		271	0.94		660	↘	0.95		640	1.04	*	9,147	↘	1.00		3,501
03	**Vancouver Coastal**	0.72	*	1,723	↘	0.67	*	1,315	0.99		206		0.95		206	1.04		555	↘	1.00		539	0.85	*	5,798	↘	0.82	*	2,086
04	Vancouver Island	1.23	*	2,344		1.30	*	1,763	0.86		126		0.92		126	1.08		371	↘	1.12		350	0.99		6,140	↘	1.06	*	2,195
05	Northern	1.65	*	945		1.78	*	804	1.26		68		1.22		68	0.75	*	98		0.75	*	97	1.30	*	1,660	↘	1.28	*	864
	Provincial Total	**1.00**		**9,964**	↘	**1.00**		**7,658**	**1.00**		**831**		**1.00**		**831**	**1.00**		**2,037**	↘	**1.00**		**1,963**	**1.00**		**28,932**	↘	**1.00**	*	**11,059**

Please refer to footnotes on Table E

BRITISH
COLUMBIA
The Best Place on Earth

Ministry of
Health Services